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REPORT ON THE 1989 DISCHARGES FROM MUNICIPAL SEWAGE TREATMENT PLANTS IN ONTARIO

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REPORT ON THE 1989 DISCHARGES FROM MUNICIPAL STPs IN ONTARIO

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Ontario Ministry of the Environment

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EXECUTIVE SUMMARY

The 1989 Municipal Discharge Report provides a comprehensive summary of the performance of all municipal and Ministry of Environment (MOE) operated Sewage Treatment Plants (STPs) in Ontario. Three parameters, Biochemical Oxygen Demand (BOD), Suspended Solids (SS) and Total Phosphorus (TP) were assessed. These parameters constitute MOE sewage effluent quality guidelines as defined in Policy 08-01 and the Canada-U.S. Water Quality Agreement.

Four hundred and twelve plants were operating in 1989. Of these, 48 plants were not assessed. Two were new plants commissioned in 1989. One had samples broken in transit before analyses were done. Thirty-five plants did not discharge to surface water in 1989. Ten plants provided insufficient data for assessment without providing reason to the MOE, as compared to 14 from 1988.

Of the 364 plants assessed, 108 (30%) exceeded the Ministry sewage effluent quality guidelines. There has not been a significant change in compliance since last year when 109 STPs out of 362 (30%) plants assessed exceeded the limits.

Specifically, 16 STPs (4% of the total number of STPs assessed) failed BOD in 1989, as compared to 15 (4%) in 1988. Forty-one (11%) failed SS in 1989, as compared to 47 (13%) in 1988. Sixty-four continuous discharge STPs and 12 non-continuous discharge lagoons (21%) failed the monthly TP requirement this year as compared to a total of 78 (22%) in 1988. Of the continuous discharge STPs in 1989, 24 plants failed TP for one month, 13 for 2 months, and 26 plants exceeded for 3 or more months.

Fifty plants failed to meet Ministry effluent guidelines for 3 successive years. Forty-six of them have improvements planned or underway. Four STPs did not report remedial action to the MOE.

Twenty STPs were assessed against the effluent limits stipulated in their Certificates of Approval (C of A). Effluent requirements in the C of A are site-specific and are generally more stringent than the Ministry guideline limits.

Kingsville Lagoon in the Southwest region did not provide sufficient data for C of A assessment. Fifteen out of the 19 plants assessed complied with their Cs of A. Four plants failed to meet their C of A limits. Two of the plants that failed their C of A limits also failed the general effluent quality criteria.

This report summarizes bypass data for mechanical plants only. The extraneous flows in those municipalities served by lagoons are bypassed at the sewer systems rather than at the plant site. Bypasses within the sewer system are regarded as combined sewer overflows and are outside the scope of this assessment report. In 1989, 177 of 244 (73%) mechanical STPs reported bypass data. This is an improvement over 1988, in which only 54% of the mechanical plants reported bypass data.

However, in 1989, only thirty-four out of 177 (19%) plants submitted the complete data set which includes volume, duration and number of instances for primary bypass and secondary bypass that occurred. Primary bypass is defined as the raw sewage that is discharged prior to primary clarification. Secondary bypass is defined as the sewage that has received solids removal at primary clarifiers but bypassed secondary biological treatment process before discharge.

In 1989, a total of 5.7×10^6 m^3 of primary bypass and 2.3×10^6 m^3 of secondary bypass were discharged. These volumes represent 3.0% and 1.0% of the total volume of treated effluent, respectively. The Stamford WPCP in Niagara Falls reported the highest volume of primary bypass (1.2×10^6 m^3 or 60% of its treated effluent volume). Belleville STP, however, is designed to provide only primary treatment for flows that exceed 55×10^3 m^3. Belleville is allowed by its C of A to bypass secondary treatment when the raw sewage exceeds this volume during wet weather. Both the primary and the secondary bypasses are generally disinfected before discharge.

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1.0 INTRODUCTION

The 1989 Municipal Discharge Report provides a comprehensive summary of the performance of all the municipal and Ministry of Environment (MOE) operated Sewage Treatment Plants (STPs) in Ontario. Three parameters, Biochemical Oxygen Demand (BOD), Suspended Solids (SS) and Total Phosphorus (TP) were assessed against Ministry sewage effluent quality guidelines. Twenty STPs were also assessed against the BOD, SS and TP limits stipulated in their Certificates of Approval (Cs of A).

This report provides useful information for the Ministry to prioritize STPs for remedial actions. Remedial actions can ensure that fewer plants will be out of compliance in the future, improving the quality of Ontario's surface waters. The main text of this report presents a brief summary of the number of plants failing BOD, SS and/or TP requirements as outlined in the Ministry effluent guidelines and C of A limits. A comparison of plants exceeding Ministry effluent guidelines between 1986 and 1989 is also discussed. In addition, plants that did not provide sufficient data for assessment and plants that exceeded Ministry effluent guidelines in three successive years are highlighted in the text.

Four appendices accompany this report. Appendix A lists all the plants exceeding Ministry effluent guidelines and indicates if they have proposed or undertaken remedial actions.

Appendix B is a summary of the plants that did not comply with their C of A. The number of plants assessed against their C of A is limited. In 1989, 183 Cs of A were reviewed but only 57 of these which were issued in recent years had compliance limits. The remaining Cs of A contain only specifications and design objectives of treatment processes and equipment to be installed. Due to data processing problems, only 20 STPs were assessed against their Cs of A in this report. Compliance against C of A limits in the remaining 37 STPs was checked by the regional staff during the once per year plant inspection.

Appendix C provides a plant by plant summary of monthly averages for flows, concentrations and loadings of the parameters assessed, effluent guidelines, C of A limits and remedial actions.

Appendix D provides a monthly summary of duration, volume and number of instances of primary bypass and secondary bypass data. Primary bypass is defined as the raw sewage that is discharged prior to treatment at primary clarifiers.

Secondary bypass is defined as the sewage that has received solids removal at primary clarifiers but bypassed secondary biological treatment process before discharge.

2.0 SIGNIFICANCE OF BOD, SS AND TP

BOD, SS and TP have traditionally been used by pollution control engineers as indicators of plant performance and effluent quality. These parameters are used by the Ministry to assess STP compliance.

The strength of sewage is often measured by the 5 day Biochemical Oxygen Demand (BOD5) test. This is the amount of oxygen required by microorganisms to reduce the organic content in sewage to carbon dioxide, measured over a 5 day period. High BOD concentrations in the effluent is an indication of high organic content remaining in the effluent, therefore ineffective treatment was provided. Discharge of such effluent may cause oxygen depletion in receiving waters and other environmental impairment.

Removal of suspended solids in sewage effluent is important since excessive amounts of solids discharged to a water course can cause aesthetic problems and kill fish by clogging their respiratory passages (gills). Also, many trace contaminants such as metals and toxic organics are often associated with the solids.

Total Phosphorus has been identified as a major factor in the eutrophication of receiving waters. Excessive amounts of phosphorus cause rapid growth of algae and weeds. When algae and weeds die, they decompose and use up dissolved oxygen. Lack of dissolved oxygen can kill aquatic organisms.

3.0 MOE GUIDELINE ASSESSMENT CRITERIA

In this report, all STPs are assessed against the Ministry's general effluent guidelines. BOD and SS are assessed on an annual average, based on the general operating requirements of Policy 08-01, "Levels of Treatment for Municipal and Private Sewage Treatment Works Discharging to Surface Waters".

Currently, TP is assessed on a monthly average basis as specified in the Canada-U.S. Agreement on Great Lakes Water Quality (October 1983).

Table 1 summarizes the effluent requirements for various types of STPs.

TABLE 1
MINISTRY GENERAL EFFLUENT REQUIREMENTS
(Based on Policy 08-01
and Canada-U.S. Agreement, 1983)

Type of Treatment	PARAMETER		
	BOD (Annual Average Basis)	Suspended Solids (Annual Average Basis)	Total Phosphorus (Monthly Average Basis)
PRIMARY:			
Without TP Removal	30% removal	50% removal	n/a
With TP Removal	50% removal	70% removal	1.0 mg/l
SECONDARY:			
Without TP Removal	25 mg/l	25 mg/l	n/a
With TP Removal	25 mg/l	25 mg/l	1.0 mg/l
LAGOONS:			
Without TP Removal	30 mg/l	40 mg/l	n/a
Continuous TP Removal	30 mg/l	40 mg/l	1.0 mg/l
Batch TP removal	25 mg/l	25 mg/l	1.0 mg/l

n/a - not applicable

4.0 MOE CERTIFICATE OF APPROVAL ASSESSMENT CRITERIA

A C of A is a legal document issued by MOE approving the construction and operation of a STP. Cs of A issued in recent years are also used to stipulate the effluent quality and/or loadings of contaminants the STPs are allowed to discharge.

Prior to the construction of a STP, an environmental assessment must be performed to assess the impact of the effluent on the receiving stream. The municipality submits this assessment to MOE for consideration.

Once the site has been approved by MOE, guidelines for the operation of the STP and compliance limits for specific contaminants are established in the C of A.

Failure to comply with C of A can result in enforcement action under the Ontario Water Resources Act or the Environmental Protection Act.

5.0 SAMPLING AND REPORTING REQUIREMENTS

Under the requirements outlined in Policy 08-06, "Policy to Govern Sampling and Analysis Requirements for Municipal and Private Sewage Treatment Works (Liquid Waste Streams Only)", STPs are required to provide a Ministry laboratory with a minimum of one influent and one effluent sample per month for analysis. Many facilities supplement this minimum requirement by doing additional analyses at their own laboratories.

Plant operators report monthly average STP flow, influent and effluent concentrations for BOD, TP and SS to the Ministry. Data are checked for accuracy at the Regional Office and then forwarded to the Ministry corporate database for processing.

In addition to reporting effluent quality, STPs also report the following information:

- Municipality
- Plant name
- Treatment type
- Region and District
- Operating authority
- Watercourse, Major Basin and Minor Basin
- IJC Designation

- Design Capacity
- Population Served
- Primary (Plant) Bypass
- Secondary Bypass

This information is available in Appendix C. The Appendix is arranged by Region (Southwest, West Central, Central, Southeast, Northeast and Northwest) and by municipality. Compliance status and remedial measures are also indicated. Regional boundaries and District Offices are shown at the beginning of each section. A summary of facilities by treatment type, operating authority and estimated hydraulic loading design capacity as well as annual average daily flow is also available at the beginning of each section. Appendix D contains the bypass data.

6.0 BACKGROUND INFORMATION OF SEWAGE TREATMENT PLANTS

At the end of 1989, sanitary sewage from systems serving over 7.2 million people was collected and treated by 412 STPs in Ontario.* Many of these plants also receive and treat wastewater discharged by industries. Some plants receive more than 40% of their flow from industries.

Sanitary sewage from the remaining population, for the most part located in rural areas, are treated by individual household septic tank and tile field systems.

Three plants started operation in 1989. They are:

Purcell	Southeast Region
Colchester	Southwest Region
Maxville Lagoon	Southeast Region

Six plants were phased out in 1989. They are:

Carleton Lodge WPCP	Southeast Region
Garden-City-Raceway	West Central Region
West Plant	West Central Region
Tottenham Lagoon	Central Region
Holtyre	Northeast Region
Kapuskasing West End	Northeast Region

Table 2 summarizes STPs by treatment type, operating agency and hydraulic loading design capacity. Table 3 summarizes STPs by treatment type, operating agency and actual annual average daily flow.

*NOTE: A STP may comprise a number of either influent or effluent discharge pipes.

STPs are operated by MOE or the municipality. Larger facilities are usually owned and operated by the municipality(ies) they serve, whereas the Ministry generally operates facilities for smaller municipalities.

In 1989, 241 STPs were operated by the Ministry and 171 were operated by municipalities. Although the Ministry operated a greater number of STPs, Table 3 shows that municipalities treated about 4 times the actual average daily flow treated by the Ministry. Conventional Activated Sludge plants treated 70% of the flow.

STPs in Ontario have a total hydraulic loading design capacity of approximately 6,040 x 1000 m^3/day ranging from 818 x 1000 m^3 at the Toronto Main STP to 0.045 x 1000 m^3 at Porquis Junction. Total annual average daily flow is 5,151 x 1000 m^3 ranging from 779 x 1000 m^3 at the Toronto Main to zero flow at those plants with no discharge in 1989. The lowest daily average flow in 1989 was .043 x 1000 m^3, which occurred at the Cana Water Pollution Control Plant (WPCP) in Pittsburg, Ontario.

Table 4 summarizes annual average daily loadings of BOD, SS and TP to Minor Basins. In 1989, a total of 92 tonnes/day of BOD, 100 tonnes/day of SS and approximately 4.5 tonnes/day of TP were discharged to receiving waters by STPs. Of the Minor Basins, Lake Ontario received the greatest loadings of all 3 parameters in 1989.

TABLE 2

DESIGN CAPACITY SUMMARY - 1989

Treatment Type	Number			Design Capacity ($1000M^3/D$)		
	Min	Mun	Tot	Ministry	Municipal	Total
Primary	8	20	28	108.10	943.18	1,051.28
Convent. Activated Sludge	32	56	88	1,004.16	3,213.67	4,217.83
Modified Activated Sludge	1	0	1	12.27	0.00	12.27
Contact Stabilization	6	8	14	23.09	46.81	69.91
Extended Aeration	66	29	95	131.50	88.60	220.10
Trickling Filter	0	1	1	0.00	0.91	0.91
High Rate	3	2	5	18.68	77.28	95.96
Oxidation Ditch	9	2	11	11.04	9.45	20.50
Communal Septic Tank	2	3	5	2.01	1.04	3.06
Aerated Lagoon	4	3	7	8.48	12.67	21.15
Convent. Lagoon Continuous	7	9	16	7.23	29.76	36.99
Convent. Lagoon Seasonal	73	24	97	65.53	82.70	148.23
Lagoon and Spray	3	1	4	1.51	0.36	1.88
Aerated Cell Plus Lagoon	14	6	20	53.01	10.44	63.46
Conventional Lagoon Annual	9	2	11	5.53	1.78	7.31
Exfiltration Lagoon	4	4	8	4.41	3.56	7.97
Rotat. Biological Contactor	0	1	1	0.00	58.18	58.18
Total	241	171	412	1,456.55	4,580.46	6,037.08

$1000M^3/D$: Thousands of cubic meters per day

TABLE 3

AVERAGE DAILY FLOW SUMMARY - 1989

Treatment Type	Number			Average Daily Flow ($1000M^3/D$)		
	Min	Mun	Tot	Ministry	Municipal	Total
Primary	8	20	28	81.44	892.72	974.16
Convent. Activated Sludge	32	56	88	737.07	2,891.80	3,628.87
Modified Activated Sludge	1	0	1	7.92	-	7.92
Contact Stabilization	6	8	14	20.06	29.46	49.52
Extended Aeration	66	29	95	87.70	64.81	152.51
Trickling Filter	0	1	1	-	20.30	20.30
High Rate	3	2	5	12.64	65.72	78.36
Oxidation Ditch	9	2	11	7.08	3.56	12.64
Communal Septic Tank	2	3	5	0.09	0.11	0.21
Aerated Lagoon	4	3	7	5.59	8.10	13.69
Convent. Lagoon Continuous	7	9	16	8.07	20.27	28.34
Convent. Lagoon Seasonal	73	24	97	49.66	28.65	78.31
Lagoon and Spray	3	1	4	1.11	0.00	1.11
Aerated Cell Plus Lagoon	14	6	20	33.41	9.12	42.53
Conventional Lagoon Annual	9	2	11	2.23	0.69	2.92
Exfiltration Lagoon	4	4	8	2.82	3.06	5.88
Rotat. Biological Contactor	0	1	1	-	56.38	56.38
Total	241	171	412	1,056.89	4,094.75	5,151.64

$1000M^3/D$: Thousands of cubic meters per day

TABLE 4

LOADING OF BIOCHEMICAL OXYGEN DEMAND, SUSPENDED SOLIDS, AND TOTAL PHOSPHOROUS TO THE MINOR BASINS

MINOR BASIN	NO. OF PLANTS	ADF 1000 M^3/D	AVG. CONCENTRATION (MG/L)			AVERAGE LOADING (TONNES/DAY)		
			BOD	SS	TP	BOD	SS	TP
ERIE	104	860.54	14.79	13.49	0.70	12.73	11.61	0.61
HURON	112	390.51	15.69	13.90	0.95	6.13	5.43	0.37
*JAMES BAY	31	67.66	20.90	26.98	2.58	1.41	1.83	0.17
*LK WINNIPEG EAST	13	34.71	18.17	21.76	1.30	0.63	0.76	0.05
ONTARIO	75	2912.04	13.95	16.06	0.68	40.63	46.76	1.99
OTTAWA RIVER	50	588.03	35.10	42.58	1.71	20.64	25.04	1.00
ST. LAWRENCE	15	150.64	26.18	21.19	0.94	3.94	3.19	0.14
SUPERIOR	12	90.48	60.11	63.35	1.58	5.44	5.73	0.14
TOTAL	412	5094.61				91.55	100.33	4.47

Note: *TP removal is not required for those plants discharging into these Water Basins. (MOE Policy 08-04)

ADF = Average Daily Flow

7.0 **1989 STATUS ON EFFLUENT GUIDELINE ASSESSMENT**

7.1 PLANTS NOT ASSESSED IN THIS REPORT

Of the 412 STPs in Ontario, 48 were not assessed because they did not provide sufficient data for assessment. Many of these did not discharge in 1989. Sufficient data is defined as 9 or more monthly observations for continuous discharge facilities in 1989 and 1 sample/month of discharge for seasonal and annual lagoons. The 48 plants can be divided into the following categories:

- No discharge to surface water

Thirty-five of the 48 plants did not discharge to surface waters. Many of these are exfiltration facilities or lagoons that did not require discharge in 1989. Table 5 summarizes these plants.

- New STPs

Two STPs were not assessed because they started operations in 1989. These plants are included in Table 6.

- Samples lost/broken during transit

One STP was not assessed because its effluent samples were broken in transit to the laboratory. This plant is included in Table 6.

- Insufficient data with no reason

The remaining 10 facilities did not provide a satisfactory explanation to the Ministry for failure to report sufficient data for assessment. These plants are listed in Table 7.

TABLE 5- STPs WITH NO DISCHARGE TO SURFACE WATER

SOUTHWEST	
Kingsville	No Discharge
Markdale Lagoon	Exfiltration
McGregor Lagoon	Lagoon and Spray
Tobermory Lagoon	Exfiltration
WEST CENTRAL	
Airport WPCP	No Discharge
Townsend Lagoon*	No Discharge
CENTRAL	
Beaverton (Sunderland)	Exfiltration
Beeton Lagoon*	Exfiltration
Omemee Lagoon*	Lagoon and Spray
Wasaga Beach WPCP*	Exfiltration
Oshawa Harmony Creek WPCP No.1	No Discharge
Oshawa Harmony Creek WPCP No.2	No Discharge
SOUTHEAST	
Embrun PV Lagoon	No Discharge
Lansdowne Lagoon*	Lagoon and Spray
Maxville Lagoon	New Plant
Munster Lagoon	Lagoon and Spray
Williamsburgh Lagoon*	No Discharge
NORTHEAST	
Belle Vallee	No Discharge
Capreol Lagoon	Exfiltration
Dubreuiville Lagoon*	Exfiltration
Jogues Lagoon	No Discharge
Kapuskasing West End*	Being Phased Out
Killarney Lagoon*	No Discharge
Larder Lake WPCP	Exfiltration
Mattawa Lagoon	Exfiltration
Opasatika Lagoon*	No Discharge
Temagami Lagoon*	No Discharge
Wahnapitae	No Discharge
Warren Lagoon*	No Discharge
White River Lagoon*	No Discharge
NORTHWEST	
Beardmore Lagoon*	Exfiltration
Caramat Lagoon	Exfiltration
Madsen WPCP*	No Discharge
Terrace Bay Lagoon	Exfiltration
Terrace Bay WPCP	Exfiltration

* = MOE operated

TABLE 6
SEWAGE TREATMENT PLANTS REPORTING A REASON FOR INSUFFICIENT DATA FOR ASSESSMENT

SOUTHWEST	
Colchester South Lagoon*	New Plant
SOUTHEAST	
Iroquois WPCP	Samples Broken
Purcell WPCP	New Plant

TABLE 7
SEWAGE TREATMENT PLANTS REPORTING INSUFFICIENT DATA FOR ASSESSMENT

SOUTHWEST	
Kingsville Lagoon	
Tilbury Lagoon	
CENTRAL	
Colborne WPCP	(TP only)
Lakeview WPCP	(BOD only)
Sutton WPCP	(TP only)
NORTHEAST	
Cecile Trailer Park Lagoon*	
Cochrane WPCP	
Earlton Lagoon	
Ramore Lagoon*	
Smooth Rock Falls WPCP*	(SS only)

* = MOE operated

7.2 PLANTS MEETING EFFLUENT GUIDELINES

A total of 364 plants were assessed against MOE effluent guidelines. Table 8 shows that 256 plants (70% of the total assessed) met all of the Ministry effluent guideline requirements. This compliance rate is the same as in 1988, when 70% or 253 out of 362 plants assessed were in compliance.

This year, 96% of the STPs assessed met the annual requirement for BOD and 89% of the STPs met the SS annual guideline.

Policy 08-04 and the Canada-U.S. Agreement require all municipal STPs discharging into Lake Erie and recreational waterways, and STPs with a design capacity of 4546 m^3/d or more and discharging into the Lake Ontario, St. Lawrence River, Lake Huron, Georgian Bay, and Ottawa River Basins to practice TP removal. Seventy-nine percent of the STPs met the monthly guideline for TP.

7.3 PLANTS EXCEEDING EFFLUENT GUIDELINES

One hundred and eight (30%) of the 364 plants assessed exceeded the Ministry's effluent guidelines by one or more parameters. Table 9 summarizes the number of STPs that exceeded guidelines. Further analysis indicates the following:

- Sixteen (4%) STPs failed BOD guidelines.

- A total of 41 (11%) STPs exceeded the guidelines for SS. Twenty-one of the plants are lagoons. Frequently, lagoons are high in SS due to algal blooms and scouring of bottom sediment from wind action. Controlling algae in lagoon effluent is a universal problem unless sand filters are used.

- Sixty-four continuous discharge STPs and 12 seasonal or annual lagoons (21% of the total STPs assessed) exceeded the limit for TP for one or more months in 1989. Of the continuous discharge plants, 24 exceeded the limit one month, 24 exceeded 2 or 3 months and 17 exceeded more than 3 months. This implies that about 7% of all the plants assessed are frequent offenders with respect to TP. Table 10 summarizes the number of continuous discharge plants exceeding TP limits on a per month basis. Diagram 1 depicts this trend schematically.

TABLE 8

SUMMARY FOR SEWAGE TREATMENT PLANTS

MEETING EFFLUENT GUIDELINES CRITERIA

Region	Total Number of STP	Number of STPs Assessed	Number of STPs Meeting Criteria for			
			All Parameters	*BOD	* SS	**TP
SOUTHWEST	105	99	67	98	85	78
WEST CENTRAL	55	52	34	49	47	38
CENTRAL	76	68	53	66	64	57
SOUTHEAST	67	60	38	56	50	44
NORTHEAST	82	63	45	57	57	51
NORTHWEST	27	22	19	22	20	20
TOTAL ( )	412	364	256 (70%)	348 (96%)	323 (89%)	288 (79%)

The figures within the parentheses are the percentage plants complying with the parameter assessed.

* SS and BOD are assessed on an annual basis.
** TP is assessed on a monthly basis; one or more months out of compliance means the plant is out of compliance for the year.

TABLE 9

SUMMARY FOR SEWAGE TREATMENT PLANTS

EXCEEDING EFFLUENT GUIDELINES CRITERIA

Region	Total Number of STPs	Number of STPs Assessed	STPs Not Meeting Criteria for			
			One or MORE Parameters	*BOD	* SS	**TP
SOUTHWEST	105	99	32	1	14	21
WEST CENTRAL	55	52	18	3	5	14
CENTRAL	76	68	15	2	4	11
SOUTHEAST	67	60	22	4	10	16
NORTHEAST	82	63	18	6	6	12
NORTHWEST	27	22	3	0	2	2
TOTAL ( )	412	364	108 (30%)	16 (4%)	41 (11%)	76 (21%)

The figures within the parentheses are the percentage plants non-complying with the parameter assessed.

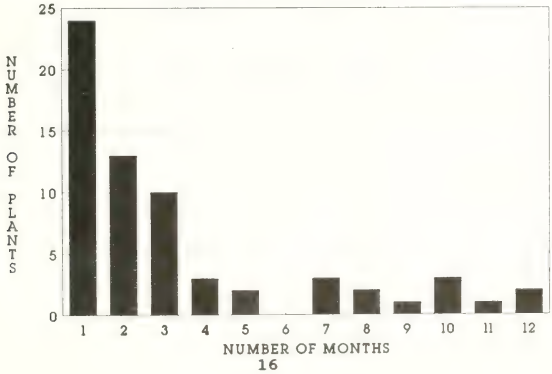
* SS and BOD are assessed on an annual basis.
** TP is assessed on a monthly basis; one or more months out of compliance means the plant is out of compliance for the year.

TABLE 10
CONTINUOUS DISCHARGE PLANTS EXCEEDING TOTAL PHOSPHORUS LIMITS

	NUMBER OF MONTHS EXCEEDING TP LIMIT											
REGION	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**
SOUTHWEST	7	2	2	1	0	0	1	1	0	1	1	0
WEST CENTRAL	5	4	3	0	1	0	1	0	0	0	0	0
CENTRAL	6	2	1	0	0	0	1	0	0	1	0	0
SOUTHEAST	3	2	3	1	0	0	0	0	1	1	0	2
NORTHEAST	3	2	1	1	1	0	0	0	0	0	0	0
NORTHWEST	0	1	0	0	0	0	0	1	0	0	0	0
TOTAL	24	13	10	3	2	0	3	2	1	3	1	2

OVERALL TOTAL = 64 STPs

DIAGRAM 1 CONTINUOUS DISCHARGE PLANTS EXCEEDING TOTAL PHOSPHORUS LIMITS



7.4 PLANTS EXCEEDING EFFLUENT LIMITS FOR THREE SUCCESSIVE YEARS

Fifty plants failed to meet Ministry guidelines three years in a row. Table 11 lists these plants and the parameters they failed.

Forty-six of these plants have remedial action plans in place. Depending on the causes of non-compliance, remedial action plans can take several months to several years to take effect (see section 9.0 for more details on the remedial measures program). Four plants have failed effluent guidelines three years in a row and have not reported any remedial actions to the MOE. These plants are:

Brighton Lagoon	Central Region
Warkworth Lagoon	Central Region
Russell Lagoon	Southeast Region
Virginia Town and Kearns	Northeast Region

TABLE 11-1

PLANTS EXCEEDING EFFLUENT GUIDELINES FOR THREE SUCCESSIVE YEARS

REGION: SOUTHWEST

FACILITY	1989			1988			1987			REMEDIAL PROGRAM
	BOD	SS	TP	BOD	SS	TP	BOD	SS	TP	
*BLENHEIM LAGOON		*			*	*		*		YES
CHESLEY LAGOON			*			*			*	YES
*COTTAM LAGOON		*			*			*		YES
*DRESDEN WPCP			*		*	*			*	YES
*DUTTON LAGOON		*			*			*	*	YES
*FOREST LAGOON		*			*			*		YES
GODERICH WPCP			*			*			*	YES
*GRAND BEND LAGOON		*			*	*		*		YES
*INGERSOLL NEW WPCP			*			*			*	YES
*LISTOWEL LAGOON			*			*			*	YES
*MERLIN PV LAGOON		*			*			*		YES
*POINT EDWARD WPCP	*	*	*	*		*			*	YES
*PORT BURWELL WPCP			*			*			*	YES
*RIDGETOWN LAGOON		*	*		*	*	*	*	*	YES
*RODNEY LAGOON		*			*		*	*	*	YES
*STONEY PT. P.V. LAGOON		*			*			*		YES

* Operated by the Ministry of the Environment

TABLE 11-2

PLANTS EXCEEDING EFFLUENT GUIDELINES FOR THREE SUCCESSIVE YEARS

REGION: WEST CENTRAL

FACILITY	1989			1988			1987			REMEDIAL PROGRAM
	BOD	SS	TP	BOD	SS	TP	BOD	SS	TP	
ANGER AVE. WPCP		*	*	*	*	*			*	YES
*BRANTFORD WPCP			*			*			*	YES
CRYSTAL BEACH WPCP			*			*		*	*	YES
*ELMIRA WPCP			*			*			*	YES
*FERGUS WPCP		*			*			*		YES
*HESPELER WPCP		*	*		*	*			*	YES
*PORT DOVER WPCP			*			*			*	YES
*ST. JACOBS PV WPCP			*		*	*			*	YES
*WATERLOO WPCP			*			*			*	YES

* Operated by the Ministry of the Environment

TABLE 11-3

PLANTS EXCEEDING EFFLUENT GUIDELINES FOR THREE SUCCESSIVE YEARS

REGION: CENTRAL

FACILITY	1989			1988			1987			REMEDIAL PROGRAM
	BOD	SS	TP	BOD	SS	TP	BOD	SS	TP	
BALA WPCP		*			*			*	*	YES
BRIGHTON LAGOON			*			*			*	NO
COBOURG WPCP NO. 1			*	*		*			*	YES
LINDSAY LAGOON			*			*			*	YES
STAYNER LAGOON		*		*	*	*	*	*	*	YES
WARKWORTH LAGOON		*			*			*		NO

* Operated by the Ministry of the Environment

TABLE 11-4

PLANTS EXCEEDING EFFLUENT GUIDELINES FOR THREE SUCCESSIVE YEARS

REGION: SOUTHEAST

FACILITY	1989			1988			1987			REMEDIAL PROGRAM
	BOD	SS	TP	BOD	SS	TP	BOD	SS	TP	
*AMHERSTVIEW LAGOON	*	*			*			*		YES
ARNPRIOR WPCP	*	*	*	*	*	*	*	*	*	YES
BROCKVILLE WPCP		*	*			*			*	YES
*CARLETON PLACE WPCP	*	*	*		*	*		*	*	YES
GREEN CREEK WPCP		*	*	*	*	*		*	*	YES
KEMPTVILLE WPCP			*		*	*		*	*	YES
*MERRICKVILLE WPCP			*			*		*	*	YES
NAPANEE WPCP			*			*		*	*	YES
*RUSSELL LAGOON		*			*			*		NO
SMITHS FALLS WPCP			*			*		*	*	YES
*WESTPORT LAGOON			*			*			*	YES

* Operated by the Ministry of the Environment

TABLE 11-5

PLANTS EXCEEDING EFFLUENT GUIDELINES FOR THREE SUCCESSIVE YEARS

REGION: NORTHEAST

FACILITY	1989			1988			1987			REMEDIAL PROGRAM
	BOD	SS	TP	BOD	SS	TP	BOD	SS	TP	
BOB'S LAKE LAGOON	*			*			*			YES
FALCONBRIDGE TOWNSITE WPCP	*	*		*	*		*	*		YES
*KIRKLAND LAKE WPCP			*			*			*	YES
*LAKE TEMISKAMING OLD WPCP			*			*			*	YES
*STURGEON FALLS WPCP			*			*			*	YES
VIRGINIATOWN AND KEARNS WPCP	*	*		*	*		*	*		NO

* Operated by the Ministry of the Environment

TABLE 11-6

PLANTS EXCEEDING EFFLUENT GUIDELINES FOR THREE SUCCESSIVE YEARS

REGION: NORTHWEST

FACILITY	1989			1988			1987			REMEDIAL PROGRAM
	BOD	SS	TP	BOD	SS	TP	BOD	SS	TP	
**ATIKOKAN WPCP			*			*			*	YES
THUNDER BAY WPCP		*	*		*	*			*	YES

** Operated by the Ministry of the Environment

8.0 **1989 STATUS ON C OF A ASSESSMENT**

8.1 PLANTS NOT ASSESSED AGAINST C of A

Most certificates issued before 1985 did not specify compliance limits, but rather design or objective limits. Sixty-nine (126 of 183) percent of the Cs of A identified to date fall into this category. These C of A will not be assessed in this Discharge Report, since they were intended as a guidance rather than a regulatory document.

In recent years, more Cs of A have clearly outlined compliance limits. Many of the older Cs of A are being replaced as STPs are upgraded or expanded.

The complexity of each C of A, as well as the limitations of the MOE computer system, limited the number of STPs that could be assessed in 1989. As a result, only 20 out of 57 STPs were evaluated against their C of A in this report. The effluent limits stipulated in these C of A are presented in Appendix C along with the plant monthly average data. Compliance with C of A limits in the other 37 STPs was checked by regional staff during plant inspections.

8.2 PLANTS COMPLYING WITH C of A

Fifteen of the 19 plants assessed complied with the limits outlined in their C of A. Table 12 summarizes the number of plants, by Region, that meet their C of A limits. Kingsville Lagoon provided insufficient data for assessment.

8.3 PLANTS NOT COMPLYING WITH C of A

The following plants failed to comply with the limits as set out in their C of A:

Tavistock Lagoon	Southwest Region
Port Weller WPCP	West Central Region
Orillia WPCP	Central Region
Green Creek WPCP	Southeast Region

Table 13 summarizes the number of plants by Region, failing their C of A limits.

TABLE 12

SUMMARY FOR SEWAGE TREATMENT PLANTS

MEETING CERTIFICATE OF APPROVAL CRITERIA

Region	Total Number of STPs	Number of STPs Assessed	Number of STPs Meeting Criteria for			
			All Parameters	*BOD	*SS	**TP
SOUTHWEST	8	7	6	7	6	7
WEST CENTRAL	2	2	1	1	2	2
CENTRAL	5	5	4	5	5	4
SOUTHEAST	2	2	1	1	1	1
NORTHEAST	3	3	3	3	3	3
NORTHWEST	0	0	0	0	0	0
TOTAL ( )	20	19	15 (79%)	17 (89%)	17 (89%)	17 (89%)

The figures within the parentheses are the percentage plants complying with the parameter assessed.

TABLE 13

SUMMARY FOR SEWAGE TREATMENT PLANTS

EXCEEDING CERTIFICATE OF APPROVAL CRITERIA

Region	Total Number of STPs	Number of STPs Assessed	STPs Not Meeting Criteria for			
			One or MORE Parameters	*BOD	* SS	** TP
SOUTHWEST	8	7	1	0	1	0
WEST CENTRAL	2	2	1	1	0	0
CENTRAL	5	5	1	0	0	1
SOUTHEAST	2	2	1	1	1	1
NORTHEAST	3	3	0	0	0	0
NORTHWEST	0	0	0	0	0	0
TOTAL ( )	20	19	4 (21%)	2 (11%)	2 (11%)	2 (11%)

The figures within the parentheses are the percentage plants non-complying with the parameter assessed.

9.0 REMEDIAL MEASURES

9.1 TIME REQUIRED FOR REMEDIAL MEASURES TO TAKE EFFECT

There can be many reasons for STP non-compliance. Non-compliance can arise as a result of inadequate process operations, equipment breakdowns, industrial spills into the municipal sewerage systems. These problems can be quickly corrected by improving the plant operations and maintenance program, and enforcing the industrial sewer use control program more diligently. Non-compliance can also be caused by poor process design, hydraulic overloads due to wet weather run-offs or rapid population growth. In these cases, the problems must be corrected by plant modification or expansion which can require up to 5 years to complete.

Plant modification/expansion entail several steps. The owner of the plant first initiates a class environmental assessment which involves a review of the problem and determination of the remedial options by a consultant. The consultant proposal and funding requirements must be approved by the municipal council and the Ministry of Environment before detailed plant design and construction can begin. As an example, the Hespeler STP started its class environmental assessment process in 1985 and is beginning to construct the final phase of plant expansion this year.

9.2 STATUS OF REMEDIAL MEASURES

Forty-two STPs which exceeded effluent guidelines in 1988 (35 of which reported remedial programs) improved their operations or upgraded their facilities sufficiently to meet Ministry guidelines in 1989. Appendix A shows that sixty-seven STPs continued to exceed effluent guidelines in 1989. Forty-one plants that complied in 1988 exceeded the limits in 1989.

Currently, 91 (84%) of the 108 plants exceeding effluent guidelines have some form of remedial action. Appendix A includes a summary of plants which have remedial action in 1989. Appendix C elaborates on these remedial actions on a plant-specific basis.

The number of plants that reported remedial action is summarized in Table 14. Four plants have failed effluent guideline limits for three successive years and have not reported any remedial programs to the MOE.

TABLE 14

SUMMARY OF STPS REPORTING REMEDIAL ACTIONS

Region	Number of STPs Exceeding Guidelines	Number of STPs Reporting Remedial Actions	% of STPs Reporting Remedial Action
SW	32	29	91
WC	18	18	100
C	15	8	53
SE	22	18	82
NE	18	15	83
NW	3	3	100

10.0 ABATEMENT OF STP OPERATIONS

In 1989, Regions initiated a program to inspect plants for compliance with Ministry Acts, Regulations, Policies and Cs of A. All Ministry and municipally-operated STPs are inspected once per year by Regional MOE Environmental Inspectors. Detailed inspections of plant operations, maintenance procedures, process equipment and records are carried out less frequently. After an inspection, the operating authority and the Ministry abatement staff are informed of any deficiencies by way of Inspection Reports.

If significant abatement measures are required, the Abatement Section will be responsible for ensuring that these are undertaken by the Operating Authority within a specified time frame. For Ministry-operated plants, the Utility operations Section would initiate measures to abate the problem or upgrade the facility.

For minor problems, the Environmental Inspector arranges for the Operating Authority to advise the Abatement Section when the deficiencies have been corrected.

Failure of the Operating Authority to comply with Regulations, Acts or Cs of A may result in prosecution by the Ministry's Investigations and Enforcement Branch.

11.0 ENFORCEMENT

The Investigations and Enforcement Branch (IEB) are alerted to action through the Occurrence Report, when a STP fails to comply with a Control Document or reports an environmental incident eg. a spill.

The current procedure for responding to an environmental incident requires a Provincial Officer or Environmental Response Person (ERP) to make an initial response. Information obtained during this initial response is essential to the success of any investigation that follows.

Prosecution may follow for any of the following reasons: the violation poses a significant risk or adverse effect to the environment or humans; the violation is deliberate in nature or if there is a degree of negligence involved; the violation is repeated or warning is disregarded; the violator has concealed information; or, the violator has an unsatisfactory record with Ministry orders.

Guidelines themselves are not legally enforceable but may form the basis to prove an offence through expert testimony in court. The expert must provide evidence to show the violation leads to a significant impairment of the receiving water body.

Enforcement actions that took place in 1989 against STPs are summarized in Table 15.

TABLE 15
ENFORCEMENT ACTIVITIES THAT HAVE GONE TO COURT AGAINST MUNICIPAL SEWAGE TREATMENT PLANTS

MUNICIPALITY	OFFENCE DESCRIPTION	DISPOSITION
Regional Municipality of Sudbury N.E. Region	Lagoon - Illegal discharge of cell contents	Went to court in 1991
District Municipality of Muskoka Central Region	Lagoon Works - Bypass at pumping station	Guilty Plea Fine -$2500.00

12.0 HISTORICAL REVIEW

Table 16 compares the number of STPs exceeding MOE guideline limits from 1986 to 1989. Some improvement in compliance with Ministry guidelines occurred over the past 4 years.

Table 17 compares the total number of facilities exceeding monthly TP requirements from 1986 to 1989. A steady improvement in compliance with TP has been observed over the past four years; for example, 49% of the plants requiring phosphorus removal were out of compliance in 1985 but only 29% were out of compliance in 1989.

Table 18 and 19 indicate that there has been little change in compliance with BOD and SS over 4 years.

TABLE 16
NUMBER OF SEWAGE TREATMENT PLANTS
EXCEEDING MOE EFFLUENT GUIDELINE LIMITS
1986 - 1989

Year	Total Number of Facilities Assessed	Number of Facilities Exceeding Guidelines	% Facilities Exceeding Limits
1986	362	151	42
1987	371	138	37
1988	362	109	30
1989	364	108	30

TABLE 17
NUMBER OF SEWAGE TREATMENT PLANTS
EXCEEDING MONTHLY TOTAL PHOSPHORUS LIMITS
1986-1989

Year	Total Number of Facilities with Phosphorus Removal	Number of Facilities Exceeding Monthly Requirements	% Facilities Exceeding Monthly Requirements
1986	258	126	49
1987	262	100	38
1988	265	78	30
1989	265	76	29

TABLE 18
NUMBER OF SEWAGE TREATMENT PLANTS
EXCEEDING EFFLUENT BOD GUIDELINE LIMITS
1985-1989

Year	Total Number of Facilities Assessed	Number of Facilities Exceeding Requirements	% Facilities Exceeding Limits
1986	362	16	4
1987	362	17	5
1988	362	15	4
1989	364	16	4

TABLE 19
NUMBER OF SEWAGE TREATMENT PLANTS
EXCEEDING EFFLUENT SS GUIDELINE LIMITS
1985-1989

Year	Total Number of Facilities with Phosphorus Removal	Number of Facilities Exceeding Requirements	% Facilities Exceeding Limits
1986	362	47	13
1987	371	53	14
1988	362	47	13
1989	364	41	11

13.0 **BYPASSES**

This report only summarizes the bypass that occurs within the boundary of a STP. Bypass occurring outside an STP, including pumping stations located outside the plant property is considered to be a combined sewer overflow and is assessed by regional staff on a case-by-case basis.

Primary bypass is the discharge of raw sewage. Secondary bypass is the sewage that has undergone solids removal at the primary clarifiers of an STP but bypassed the biological treatment process before discharge.

Bypasses may occur for a number of reasons such as:

1. An increase in hydraulic loading due to infiltration or inflow from a storm event or spring thaw;

2. Operational problems, eg., equipment breakdown; or,

3. STP is under-sized.

Bypasses often occur during storm events or spring thaw as a way of preventing micro-organisms from being washed out from the biological treatment process in a secondary plant, or to prevent flooding of the STPs and surrounding areas. Bypasses under dry weather conditions are not allowed since they can be prevented by expanding the treatment plant or properly maintaining process equipment.

STPs are required to report the volume, duration and number of instances of bypasses. Appendix D summarizes the 1989 monthly bypass data for mechanical STPs only. Lagoons typically bypass at off-site locations which are considered as Combined Sewer Overflows.

One hundred and seventy-seven or 73% of the total number of mechanical STPs (244) reported bypass data in 1989. The number of plants reporting bypass data to the Ministry has improved. In 1988, only 54% of the mechanical STPs reported bypass data.

A number of deficiencies in the 1989 database were identified as follows:

1. Only 34 out of 177 (19%) mechanical plants submitted the complete data set which includes volume, duration and number of instances for either primary bypass or secondary bypass. This is an improvement over last year in which only 6 STPs reported complete data sets.

2. Most STPs do not have flow monitoring devices for bypasses; this results in poorly estimated volume.

3. Frequently, there are no devices to record the occurrence of a bypass. A bypass occurring when the plant is not staffed would go unnoticed. As a result, the number of instances and duration of bypasses can be higher than the data reported.

4. This year a number of interpretation problems was evident. Many plants have reported the number of days in a month as opposed to the number of times a bypass occurred in a month.

Keeping these deficiencies in mind, Table 20 should be treated as cursory information only. This table summarizes the total volume, duration, number of instances and ratio of volume of bypass to treated effluent for raw sewage bypass and secondary bypass.

TABLE 20
ANNUAL SUMMARY OF PRIMARY AND SECONDARY BYPASSES

	PRIMARY BYPASS				SECONDARY BYPASS			
	VOLUME ($1000m^3$)	DURATION (HOURS)	NO. OF TIMES	*RATIO	VOLUME ($1000m^3$)	DURATION (HOURS)	NO. OF TIMES	*RATIO
TOTAL	5702.79	4,070.9	3893	3.00%	2277.91	5,476.1	1772	1.0%
MAXIMUM	1246.05	1,043.0	364	60.00%	802.95	1,813.0	363	7.5%
PLANT	STAMFORD WPCP	CARLETON PLACE WPCP		STAMFORD WPCP	BELLEVILLE WPCP	BELLEVILLE WPCP		BELLEVILLE WPCP
MINIMUM	0.01	0.1	1	<0.01%	0.15	0.5	1	0.08%
PLANT	EAR FALLS WPCP	SAULT STE. MARIE-WEST END		EAR FALLS WPCP	WELLINGTON WPCP	OAKVILLE SOUTHWEST WPCP		WELLINGTON WPCP

N.B. Ratio (%) is the ratio of bypass effluent over treated effluent (expressed as a percent) at the plants reporting a bypass.

The maximum and minimum data reported are the values for bypassed effluent for a given plant on an annual basis. The plant that bypassed the maximum volume did not necessarily have the maximum duration time nor the number of occurrences.

The longest duration of secondary bypass occurred at Belleville. Belleville was designed to provide only primary treatment for flows in excess of 55 X 10^3 m^3 during wet weather.

14.0 **ENQUIRIES**

Enquiries about specific STPs may be directed to the Ministry's Regional Offices or District Offices. These addresses and phone numbers are available in Appendix B at the beginning of each Regional section.

Copies of this report are available from:

Communications Branch,
Ministry of the Environment,
135 St. Clair Ave. W., 6th Floor,
Toronto, Ontario
M4V 1P5
323-4321

Enquiries concerning this report may be directed to:

Ministry of the Environment,
MISA Municipal Office,
Water Resources Branch,
1 St. Clair Ave. W., 9th Floor,
Toronto, Ontario.
M4V 1K6
323-4980

APPENDIX A

WASTEWATER TREATMENT FACILITIES EXCEEDING EFFLUENT REQUIREMENTS FOR 1989

EXPLANATORY NOTES FOR APPENDIX A

BOD and SS are assessed on an annual basis.

TP is assessed on a monthly basis. The value associated with the TP column is the number of months per year that the TP limit was exceeded.

SEWAGE TREATMENT PLANTS
EXCEEDING EFFLUENT REQUIREMENTS IN 1989

REGION : SOUTHWEST

PLANT NAME	1989 EXCEEDANCES					REMEDIAL PROGRAM	ANTICIPATED COMPLIANCE
	BOD	SS	TP	1988	1987		
+AILSA CRAIG WPCP			1		*	YES	1989/09
+BELMONT LAGOON			1		*	YES	1989/05
+BLENHEIM LAGOON		33.4		*	*	YES	1990/04
+BRIGDEN P.V. LAGOON		44.3				YES	1990/04
CHESLEY LAGOON			4	*	*	YES	1989/09
+COTTAM LAGOON		75.3		*	*	YES	1990/04
+DRESDEN WPCP			1	*	*	YES	
+DUTTON LAGOON		36.7		*	*	YES	1991/12
+FOREST LAGOON		74.7		*	*	YES	1990/04
+GLENCOE LAGOON		36.9	1	*		YES	1990/04
GODERICH WPCP			1	*	*	YES	
+GRAND BEND LAGOON		36.7		*	*	YES	1990/04
+INGERSOLL NEW WPCP			8	*	*	YES	1990/01
+INGERSOLL OLD WPCP			10			YES	1990/01
+KINCARDINE LAGOON			7	*		YES	1990/01
LEAMINGTON WPCP			1			NO	
+LISTOWEL LAGOON CONT DI			3	*	*	YES	
+MERLIN PV LAGOON		93.6		*	*	YES	1990/04
+MILDMAY WPCP			1			YES	1989/11
+MITCHELL'S BAY LAGOON		100.3		*		YES	1990/04

NOTE:
+ = MOE OPERATED PLANT
* INDICATES PLANT WAS OUT OF COMPLIANCE FOR THAT YEAR

SEWAGE TREATMENT PLANTS
EXCEEDING EFFLUENT REQUIREMENTS IN 1989

REGION : SOUTHWEST

PLANT NAME	1989 EXCEEDANCES					REMEDIAL PROGRAM	ANTICIPATED COMPLIANCE
	BOD	SS	TP	1988	1987		
+OIL SPRINGS LAGOON		29.4			*	YES	1990/04
+POINT EDWARD WPCP	21%	43%	11	*	*	YES	1992/01
+PORT BURWELL WPCP			1	*	*	YES	1989/07
+PORT STANLEY LAGOON			1			YES	1990/04
+RIDGETOWN LAGOON		46.4	2	*	*	YES	1990/04
+RODNEY LAGOON		31.3		*	*	YES	
SARNIA WPCP			1	*		NO	
ST THOMAS WPCP			3	*		YES	
+STONEY POINT P.V. LAGOON		25.1		*	*	YES	
STRATHROY LAGOON			2		*	YES	1991/06
+WALLACEBURG WPCP			2	*		YES	1990/01
WESTERLY WPCP			1			NO	

NOTE:
+ = MOE OPERATED PLANT
* INDICATES PLANT WAS OUT OF COMPLIANCE FOR THAT YEAR

SEWAGE TREATMENT PLANTS
EXCEEDING EFFLUENT REQUIREMENTS IN 1989

REGION : WEST CENTRAL

PLANT NAME	1989 EXCEEDANCES					REMEDIAL PROGRAM	ANTICIPATED COMPLIANCE
	BOD	SS	TP	1988	1987		
ANGER AVE.WPCP	33.6	28.7	2	*	*	YES	1990
+BRANTFORD WPCP			1	*	*	YES	1990/01
CRYSTAL BEACH WPCP			3	*	*	YES	
+DUNNVILLE WPCP			1			YES	1989/06
+ELMIRA WPCP (COMBINED F			3	*	*	YES	1990
ELORA WPCP			1			YES	1990/01
+FERGUS WPCP		25.9		*	*	YES	
+HESPELER WPCP		38.6	7	*	*	YES	
+JARVIS LAGOON		34.2			*	YES	1990
PORT DALHOUSIE WPCP		25.1	1			YES	
+PORT DOVER WPCP			2	*	*	YES	1993
PORT WELLER WPCP	26.3					YES	1990
+PRESTON WPCP			3			YES	
SEAWAY WPCP	26.7			*		YES	1991
+SHELBURNE WPCP			1	*		YES	1991/01
+ST.JACOBS PV WPCP			2	*	*	YES	1994
+WATERLOO WPCP			5	*	*	YES	1990
WELLAND WPCP			2		*	YES	1991

NOTE:
+ = MOE OPERATED PLANT
* INDICATES PLANT WAS OUT OF COMPLIANCE FOR THAT YEAR

SEWAGE TREATMENT PLANTS
EXCEEDING EFFLUENT REQUIREMENTS IN 1989

REGION : CENTRAL

PLANT NAME	1989 EXCEEDANCES					REMEDIAL PROGRAM	ANTICIPATED COMPLIANCE
	BOD	SS	TP	1988	1987		
BALA WPCP		44%		*	*	YES	1991
BRIGHTON LAGOON			1	*	*	NO	
COBOURG WPCP NO 1			7	*	*	YES	1989/12
DUFFIN CREEK WPCP	25.1		1	*		YES	1990/01
FOX ST. WPCP			1			YES	
GEORGETOWN WPCP			1			NO	
HARMONY CREEK 1&2	26.5		1			YES	1990/01
LAKEFIELD LAGOON			1	*		NO	
LINDSAY LAGOON			3	*	*	YES	
MIDLAND WPCP			1		*	NO	
MOUNT ALBERT WPCP		26.0			*	NO	
NORTH TORONTO WPCP			2	*		YES	1989/05
PENETANGUISHENE WPCP			2	*		NO	
STAYNER LAGOON		26.3		*	*	YES	1991/08
WARKWORTH LAGOON		29		*	*	NO	

NOTE:
+ = MOE OPERATED PLANT
* INDICATES PLANT WAS OUT OF COMPLIANCE FOR THAT YEAR

SEWAGE TREATMENT PLANTS
EXCEEDING EFFLUENT REQUIREMENTS IN 1989

REGION : SOUTHEAST

PLANT NAME	1989 EXCEEDANCES					REMEDIAL PROGRAM	ANTICIPATED COMPLIANCE
	BOD	SS	TP	1988	1987		
+ALFRED LAGOON	31.5					NO	
+AMHERSTVIEW LAGOON	30.5	64.6		*	*	YES	
ARNPRIOR WPCP	32%	58%	1	*	*	YES	1992
+BATAWA WPCP			2			NO	
BROCKVILLE WPCP		64%	9	*	*	YES	
+CARLETON PLACE WPCP	31.4	57.5	10	*	*	YES	1992
DEEP RIVER WPCP		42%			*	YES	
GREEN CREEK WPCP		65%	12	*	*	YES	1991
KEMPTVILLE WPCP			12	*	*	YES	1995
+MERRICKVILLE WPCP			3	*	*	YES	
MORRISBURG WPCP		40%			*	YES	
NAPANEE WPCP			3	*	*	YES	1990
+ODESSA WPCP			4	*		YES	1990
+PETAWAWA WPCP			1		*	YES	1990
+RUSSELL LAGOON		72.3		*	*	NO	
SMITHS FALLS WPCP			3	*	*	YES	1993
+ST.ISIDORE LAGOON		296.7				YES	1990
STIRLING LAGOON		43.3	1	*		YES	1990
+TWEED LAGOON			1	*		YES	1990
WATTS CREEK WPCP			1			NO	

NOTE:
+ = MOE OPERATED PLANT
* INDICATES PLANT WAS OUT OF COMPLIANCE FOR THAT YEAR

SEWAGE TREATMENT PLANTS
EXCEEDING EFFLUENT REQUIREMENTS IN 1989

REGION : SOUTHEAST

PLANT NAME	1989 EXCEEDANCES					REMEDIAL PROGRAM	ANTICIPATED COMPLIANCE
	BOD	SS	TP	1988	1987		
WELLINGTON WPCP			2	*		YES	1990
+WESTPORT LAGOON			1	*	*	YES	

NOTE:
+ = MOE OPERATED PLANT
* INDICATES PLANT WAS OUT OF COMPLIANCE FOR THAT YEAR

SEWAGE TREATMENT PLANTS
EXCEEDING EFFLUENT REQUIREMENTS IN 1989

REGION : NORTHEAST

PLANT NAME	1989 EXCEEDANCES					REMEDIAL PROGRAM	ANTICIPATED COMPLIANCE
	BOD	SS	TP	1988	1987		
BOB'S LAKE LAGOON	32.3			*	*	YES	1992
+CALLANDER LAGOON		32.8	1			YES	1989/09
CHELMSFORD WPCP			2			YES	1991/01
+ENGLEHART LAGOON			2	*		YES	
+ESPANOLA WPCP		48%				YES	
ESTEN LAKE WPCP	97.6					NO	
FALCONBRIDGE TOWNSITE WP	38.6	44.3		*	*	YES	1990/12
HARTY LAGOON			1			NO	
+KIRKLAND LAKE WPCP			3	*	*	YES	
+LAKE TEMISKAMING NEW WPC			1			YES	
+LAKE TEMISKAMING OLD WPC			1	*	*	YES	
+MOOSONEE WPCP (OLD TOWNS	42.3	45.7		*		YES	
+NEW LISKEARD LAGOON			5			YES	
+ST.CHARLES LAGOON			1	*		YES	
+STURGEON FALLS WPCP			4	*	*	YES	
VIRGINIATOWN AND KEARNS	21%	10%		*	*	NO	
+WAWA LAGOON	6.7	7.6	1			YES	
+WEST END WPCP			1			YES	

NOTE:
+ = MOE OPERATED PLANT
* INDICATES PLANT WAS OUT OF COMPLIANCE FOR THAT YEAR

SEWAGE TREATMENT PLANTS
EXCEEDING EFFLUENT REQUIREMENTS IN 1989

REGION : NORTHWEST

PLANT NAME	1989 EXCEEDANCES					REMEDIAL PROGRAM	ANTICIPATED COMPLIANCE
	BOD	SS	TP	1988	1987		
+ATIKOKAN WPCP			2	*	*	YES	1990
SIOUX LOOKOUT WPCP		30.9				YES	
THUNDER BAY WPCP		67%	8	*	*	YES	

NOTE:
+ = MOE OPERATED PLANT
* INDICATES PLANT WAS OUT OF COMPLIANCE FOR THAT YEAR

APPENDIX B

WASTEWATER TREATMENT FACILITIES EXCEEDING C OF A REQUIREMENTS FOR 1989

EXPLANATORY NOTES FOR APPENDIX B

Each STP has a site specific C of A. Monitoring frequencies indicated on the C of A may vary depending on stream sensitivity and parameter being assessed. Therefore, this appendix only highlights, by an asterisk, which parameter has been exceeded. For more detailed assessment see individual plants in Appendix C.

SEWAGE TREATMENT PLANTS
EXCEEDING CERTIFICATE OF APPROVAL REQUIREMENTS IN 1989

REGION : SOUTHWEST

PLANT NAME	NON-COMPLIANCE			REMEDIAL PROGRAM(S)	ANTICIPATED COMPLIANCE
	BOD	SS	TP		
+TAVISTOCK LAGOON		*		NO	

NOTE:
+ = MOE OPERATED PLANT
* INDICATES PLANT WAS OUT OF COMPLIANCE FOR THAT YEAR

SEWAGE TREATMENT PLANTS
EXCEEDING CERTIFICATE OF APPROVAL REQUIREMENTS IN 1989

REGION : WEST CENTRAL

PLANT NAME	NON-COMPLIANCE			REMEDIAL PROGRAM(S)	ANTICIPATED COMPLIANCE
	BOD	SS	TP		
PORT WELLER WPCP	*			YES	1990

NOTE:
+ = MOE OPERATED PLANT
* INDICATES PLANT WAS OUT OF COMPLIANCE FOR THAT YEAR

SEWAGE TREATMENT PLANTS
EXCEEDING CERTIFICATE OF APPROVAL REQUIREMENTS IN 1989

REGION : CENTRAL

PLANT NAME	NON-COMPLIANCE			REMEDIAL PROGRAM(S)	ANTICIPATED COMPLIANCE
	BOD	SS	TP		
ORILLIA WPCP			*	YES	

NOTE:
+ = MOE OPERATED PLANT
* INDICATES PLANT WAS OUT OF COMPLIANCE FOR THAT YEAR

SEWAGE TREATMENT PLANTS
EXCEEDING CERTIFICATE OF APPROVAL REQUIREMENTS IN 1989

REGION : SOUTHEAST

PLANT NAME	NON-COMPLIANCE			REMEDIAL PROGRAM(S)	ANTICIPATED COMPLIANCE
	BOD	SS	TP		
GREEN CREEK WPCP	*	*	*	YES	

NOTE:
+ = MOE OPERATED PLANT
* INDICATES PLANT WAS OUT OF COMPLIANCE FOR THAT YEAR

APPENDIX C

WASTEWATER TREATMENT FACILITIES LISTINGS AND OPERATING DATA FOR 1989

ABBREVIATIONS FOR APPENDIX C

AVG .....Average

BOD .....Biochemical Oxygen Demand

INF .....Influent

kg/d .....Kilograms per day

m3 .....Cubic metres

mg/l .....Milligrams per litre

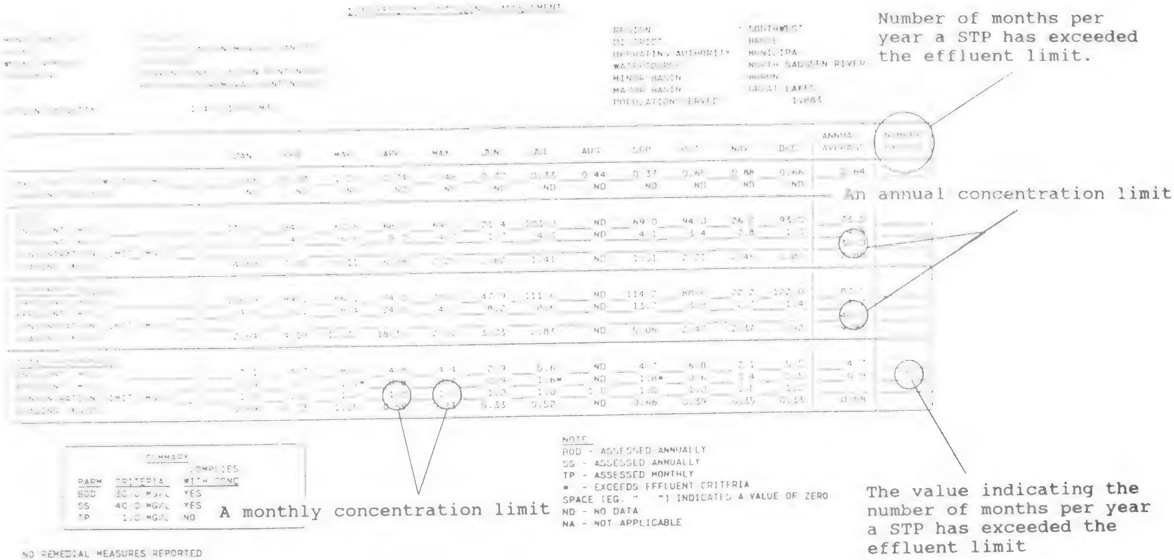
Number Exceed .....Number of months per year a STP has exceeded the effluent limit

P.V. .....Police Village

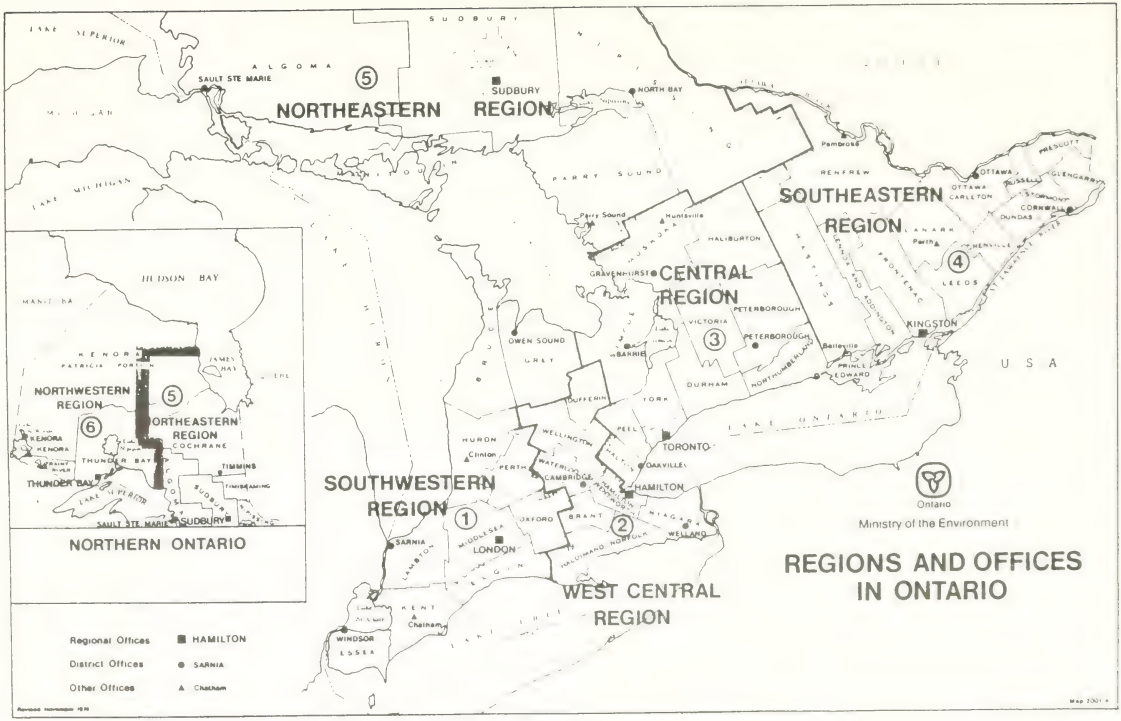
SS .....Suspended Solids

TP .....Total Phosphorus

WPCP .....Water Pollution Control Plant (same as STP)



Number of months per year a STP has exceeded the effluent limit.
An annual concentration limit
The value indicating the number of months per year a STP has exceeded the effluent limit
A monthly concentration limit
NORTH SAUGEEN RIVER
GREAT LAKES
JAN
MAY
JUN
JUL
AUG
SEP
NOV
DEC
ND
SUMMARY
PARM
CRITERIA
BOD
SS
TP
YES
YES
NO
NOTE
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
ND - NO DATA
NA - NOT APPLICABLE
NO REMEDIAL MEASURES REPORTED


NORTHEASTERN REGION
5
SUDBURY REGION
SOUTHEASTERN REGION
4
CENTRAL REGION
3
SOUTHWESTERN REGION
1
WEST CENTRAL REGION
2
NORTHWESTERN REGION
6
NORTHEASTERN REGION
NORTHERN ONTARIO
HUDSON BAY
SAULT STE MARIE
SUDBURY
NORTH BAY
Pembroke
Parry Sound
Huntsville
HALIBURTON
GRAVENHURST
PETERBOROUGH
Belleville
PRINCE EDWARD
KINGSTON
Perth
OTTAWA
OTTAWA CARLETON
RUSSELL
GLENGARRY
STORMONT
CORNWALL
DUNDAS
PRESCOTT
LEEDS
GRENVILLE
LANARK
RENFREW
FRONTENAC
LENNOX AND ADDINGTON
HASTINGS
VICTORIA
DURHAM
NORTHUMBERLAND
OWEN SOUND
GREY
BARRIE
DUFFERIN
YORK
PEEL
TORONTO
OAKVILLE
HAMILTON
WELLINGTON
HURON
Clinton
PERTH
WATERLOO
CAMBRIDGE
HALDIMAND-NORFOLK
NIAGARA
WELLAND
OXFORD
BRANT
MIDDLESEX
LONDON
SARNIA
LAMBTON
KENT
Chatham
ESSEX
WINDSOR
LAKE ONTARIO
LAKE ERIE
LAKE SUPERIOR
LAKE MICHIGAN
LAKE HURON
ALGOMA
SUDBURY
PARRY SOUND
MANITOULIN
KENORA
PATRICIA PORTION
JAMES BAY
THUNDER BAY
COCHRANE
TIMMINS
TIMISKAMING
RAINY RIVER
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Other Offices
Chatham

Georgian Bay
Lake Huron
OWEN SOUND
SARNIA
LONDON
Lake Erie
WINDSOR

Southwestern Region

1

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SOUTHWEST SUMMARY - 1989

Treatment Type	Number			Design Capacity (1000M3/D)		
	Min	Mun	Tot	Ministry	Municipal	Total
Primary	2	3	5	27.14	237.34	264.48
Conventional Activated Sludge	8	12	20	57.09	359.41	416.50
Contact Stabilization	0	1	1	-	1.82	1.82
Extended Aeration	18	2	20	32.63	23.17	55.80
High Rate	1	0	1	3.90	-	3.90
Oxidation Ditch	2	1	3	3.75	6.45	10.20
Aerated Lagoon	2	2	4	2.94	8.58	11.52
Convent. Lagoon Continuous	2	1	3	3.61	1.46	5.07
Conventional Lagoon Seasonal	31	3	34	34.71	6.31	41.02
Lagoon and Spray	1	0	1	0.57	-	0.57
Aerated Cell Plus Lagoon	7	1	8	20.22	0.17	20.39
Conventional Lagoon Annual	5	0	5	2.15	-	2.15
TOTALS	79	26	105	188.71	644.71	833.42

1000M3/D: Thousands of cubic meters per day
ADF: Average Daily Flow

SOUTHWEST SUMMARY - 1989

Treatment Type	Number			Annual ADF (1000M3/D)		
	Min	Mun	Tot	Ministry	Municipal	Total
Primary	2	3	5	15.18	159.35	174.53
Conventional Activated Sludge	8	12	20	44.61	310.14	354.75
Contact Stabilization	0	1	1	0.00	1.62	1.62
Extended Aeration	18	2	20	17.68	22.21	39.89
High Rate	1	0	1	2.89	0.00	2.89
Oxidation Ditch	2	1	3	1.49	3.97	5.46
Aerated Lagoon	2	2	4	1.21	5.02	6.23
Convent. Lagoon Continuous	2	1	3	3.79	0.79	4.58
Conventional Lagoon Seasonal	31	3	34	23.78	9.06	32.84
Lagoon and Spray	1	0	1	0.57	0.00	0.57
Aerated Cell Plus Lagoon	7	1	8	13.64	0.00	13.64
Conventional Lagoon Annual	5	0	5	1.40	0.00	1.40
TOTALS	79	26	105	126.24	512.16	638.40

1000M3/D: Thousands of cubic meters per day
ADF: Average Daily Flow

1989 EFFLUENT GUIDELINES ASSESSMENT

[illegible] : ELVINATON
[illegible] : ELVINATON [illegible]
[illegible] : [illegible]
[illegible] : [illegible] EVALUATION
[illegible] : REMOVAL CONTINUOUS

[illegible] : [illegible] MGD

REGION : SOUTHWEST
DISTRICT : LAMBTON
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : SYDENHAM RIVER
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 600

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (MGD)	0.25	0.19	0.20	0.25	0.18	0.19	0.16	0.15	0.16	0.16	0.18	0.24	0.19	
[illegible]														
[illegible] (MG/L)	92.0	116.0	179.0	90.0	163.0	152.0	141.0	158.0	184.0	142.0	118.0	123.0	133.8	
[illegible] (MG/L)	2.0	4.9	4.1	4.7	5.4	3.3	1.7	3.4	2.7	0.1	3.6	4.8	3.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	0.85	0.95	0.82	1.17	0.97	0.62	0.27	0.51	0.48	0.01	0.64	1.35	0.67	
[illegible]														
[illegible] (MG/L)	185.0	178.0	171.0	72.0	175.0	162.0	129.0	161.0	207.0	[illegible]	109.0	74.0	142.5	
[illegible] (MG/L)	8.5	8.2	9.7	4.2	3.4	5.0	4.6	5.1	5.2	5.8	4.1	4.4	5.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	2.12	1.55	1.94	1.05	0.61	0.95	0.73	0.46	0.93	0.86	0.73	1.05	1.05	
[illegible]														
[illegible] (MG/L)	5.6	10.2	6.8	6.8	6.8	6.8	8.8	7.1	9.1	6.8	7.2	6.5	7.4	
[illegible] (MG/L)	0.3	0.8	0.5	0.2	0.2	0.3	0.5	0.6	0.3	0.3	0.4	0.4	0.4	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	0.07	0.15	0.10	0.05	0.03	0.05	0.08	0.09	0.05	0.04	0.07	0.09	0.08	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 CERTIFICATE OF APPROVAL ASSESSMENT

MUNICIPALITY : AMHERSTBURG
PLANT : AMHERSTBURG WPCP
WORKS NUMBER : 120001087
TREATMENT : PRIMARY
: PHOSPHORUS REMOVAL-CONTINUOUS
:
DESIGN CAPACITY : 7.76 (1000 M3)

REGION : SOUTHWEST
DISTRICT : ESSEX
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : DETROIT RIVER
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 8,500

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	6.43	5.43	6.06	7.60	5.83	6.45	ND	6.20	7.22	5.66	5.83	5.44	6.20	
BOD5														
INFLUENT (MG/L)	59.0	167.0	167.0	39.0	55.0	ND	31.0	20.0	23.0	91.0	101.0	ND	75.3	
EFFLUENT (MG/L)	7.0	12.2	12.2	12.8	17.9	ND	27.2	ND	11.3	8.6	18.0	ND	14.1	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	45.01	66.24	73.93	97.28	104.35	ND	ND	ND	81.58	48.67	104.94	ND	87.42	
LOADING LIMIT (KG/D)														
SUSPENDED SOLIDS														
INFLUENT (MG/L)	176.0	96.0	161.0	169.0	89.0	88.0	121.0	131.0	129.0	128.0	133.0	136.0	129.8	
EFFLUENT (MG/L)	28.6	28.2	28.1	27.0	22.7	28.9	26.8	28.8	28.9	28.8	29.0	29.0	27.9	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	183.89	153.12	170.28	205.20	132.34	186.40	ND	178.56	208.65	163.00	169.07	157.76	172.98	
LOADING LIMIT (KG/D)														
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	4.5	4.2	2.3	2.4	3.3	4.3	2.5	3.2	3.5	3.7	3.5	3.6	3.4	
EFFLUENT (MG/L)	1.0	1.0	0.9	0.9	0.9	0.8	1.0	1.0	1.0	1.0	1.0	0.9	1.0	
CONCENTRATION LIMIT (MG/L)													1.0	
LOADING (KG/D)	6.43	5.43	5.45	6.84	5.24	5.16	ND	6.20	7.22	5.66	5.83	4.89	6.20	
LOADING LIMIT (KG/D)														

SUMMARY

PARM	CRITERIA	LOADING	COMPLIES WITH CONC	COMPLIES WITH LOADING
BOD	NA	NA	NA	NA
SS	30.0 MG/L	NA	YES	NA
TP	1.0 MG/L	NA	YES	NA

NOTE:
BOD - HAS NO CRITERIA
SS - ASSESSED ANNUALLY
TP - ASSESSED ANNUALLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

[illegible]
[illegible]
[illegible]
[illegible]

REGION : SOUTHWEST
DISTRICT : ESSEX
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : DETROIT RIVER
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 8,500

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
[illegible]	6.43	5.43	6.06	7.60	5.83	6.45	ND	6.20	7.22	5.66	5.83	5.44	6.20	
[illegible]														
[illegible] (MG/L)	59.0	167.0	167.0	39.0	55.0	ND	51.0	20.0	23.0	91.0	101.0	ND	75.3	
[illegible] (MG/L)	1.0	12.2	12.2	12.8	17.9	ND	27.2	ND	11.3	8.6	18.0	ND	14.1	
[illegible] (KG/D)	45.01	66.21	73.94	97.28	104.35	ND	ND	ND	81.98	48.67	104.94	ND	87.42	
[illegible]	86	93	93	67	67		12		51	91	82		81	
[illegible] LIMITS													50	
[illegible]														
[illegible] (MG/L)	126.0	96.0	161.0	169.0	89.0	88.0	121.0	131.0	129.0	128.0	133.0	136.0	129.8	
[illegible] (MG/L)	28.6	28.2	28.1	27.0	22.7	28.9	26.8	28.8	28.9	28.8	29.0	29.0	27.9	
[illegible] (KG/D)	183.89	156.12	170.28	205.20	132.34	186.40	ND	178.56	208.65	163.00	169.07	157.76	172.98	
[illegible]	84	71	83	84	74	67	78	78	78	78	78	79	79	
[illegible] LIMITS													70	
[illegible]														
INFLUENT (MG/L)	4.5	4.2	2.3	2.4	3.3	4.3	2.5	3.2	3.5	3.7	3.5	3.6	3.4	
EFFLUENT (MG/L)	1.0	1.0	0.9	0.9	0.9	0.8	1.0	1.0	1.0	1.0	1.0	0.9	1.0	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	6.83	5.43	5.49	6.84	5.24	5.16	ND	6.20	7.22	5.66	5.83	4.89	6.20	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	50%	YES
SS	70%	YES
TP	1.0 MG/L	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : ANDERDON
PLANT : EDGEWATER BEACH LAGOON
WORKS NUMBER : 110002407
TREATMENT : CONVENTIONAL LAGOON SEASONAL
: PHOSPHORUS REMOVAL-CONTINUOUS
:
DESIGN CAPACITY : 1.61 (1000 M3)

REGION : SOUTHWEST
DISTRICT : ESSEX
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : DETROIT RIVER
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 1,869

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.56	0.49	0.56	0.88	0.54	0.83	0.73	0.59	0.58	0.50	0.52	0.50	0.61	
LAGOON DISCHARGE	ND	ND	ND	11.82	91.57	44.32	ND	ND	ND	ND	108.42	14.31	54.09	
BOD5														
INFLUENT (MG/L)	166.0	124.0	116.0	53.0	155.0	70.0	90.0	146.0	97.0	128.0	134.0	174.0	121.1	
EFFLUENT (MG/L)	ND	ND	ND	2.5	4.1	4.4	ND	ND	ND	ND	4.2	16.5	6.3	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	2.20	2.21	3.65	ND	ND	ND	ND	2.18	8.25	3.84	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	90.0	89.0	133.0	42.0	119.0	63.0	74.0	106.0	78.0	74.0	64.0	88.0	85.0	
EFFLUENT (MG/L)	ND	ND	ND	4.8	4.9	6.4	ND	ND	ND	ND	7.9	22.3	9.3	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	4.22	2.64	5.31	ND	ND	ND	ND	4.10	11.15	5.67	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	8.3	7.8	7.2	2.6	10.5	5.1	6.7	7.3	5.9	6.7	7.3	7.7	6.9	
EFFLUENT (MG/L)	ND	ND	ND	0.1	0.2	0.5	ND	ND	ND	ND	0.3	0.6	0.3	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	0.08	0.10	0.41	ND	ND	ND	ND	0.15	0.30	0.18	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	1.0 MG/L	YES

NO REMEDIAL MEASURES REPORTED

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : ANDERDON
PLANT : MCGREGOR LAGOON
WORKS NUMBER : 1100020086
TREATMENT : LAGOON AND SPRAY
: NO DISCHARGE
:
DESIGN CAPACITY : 0.96 (1000 M3)

REGION : SOUTHWEST
DISTRICT : ESSEX
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : NO DISC TO SURFACE WATER
MINOR BASIN : ER11
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 1,734

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVR. DAILY FLOW (1000 M3)	0.55	0.48	0.52	0.60	0.57	0.67	0.79	0.50	0.56	0.52	0.61	0.49	0.57	
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	13.60	117.34	ND	ND	ND	ND	65.47	
BOD5														
INFLUENT (MG/L)	116.0	130.0	159.0	84.0	162.0	87.0	115.0	136.0	130.0	104.0	159.0	163.0	128.8	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	8.0	5.0	ND	ND	ND	ND	6.5	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	6.32	2.50	ND	ND	ND	ND	3.71	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	120.0	128.0	164.0	88.0	129.0	120.0	83.0	128.0	122.0	122.0	97.0	117.0	118.2	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	18.2	12.1	ND	ND	ND	ND	15.2	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	14.37	6.05	ND	ND	ND	ND	8.66	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	7.5	8.3	9.0	4.7	6.0	6.6	6.8	6.7	6.7	5.6	6.9	8.5	6.9	—
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	0.3	0.3	ND	ND	ND	ND	0.3	
CONCENTRATION LIMIT (MG/L)														—
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	0.23	0.15	ND	ND	ND	ND	0.17	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	NA	NO DIRECT DISCHARGE
SS	NA	NO DIRECT DISCHARGE
TP	NA	NO DIRECT DISCHARGE

NOTE:
BOD - HAS NO CRITERIA
SS - HAS NO CRITERIA
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (E.G. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : ARRAN
PLANT : TARA LAGOON
WORKS NUMBER : 110003237
TREATMENT : CONVENTIONAL LAGOON SEASONAL
: PHOSPHORUS REMOVAL-CONTINUOUS
:
DESIGN CAPACITY : 0.65 (1000 M3)

REGION : SOUTHWEST
DISTRICT : BRUCE
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : SAUBLE RIVER
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 637

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.25	0.22	0.33	0.23	0.20	0.21	0.20	0.19	0.20	0.21	0.23	0.23	0.23	
LAGOON DISCHARGE	ND	ND	ND	56.09	ND	ND	ND	ND	ND	ND	21.72	ND	38.91	
BOD5														
INFLUENT (MG/L)	137.0	158.0	137.0	132.0	180.0	194.0	188.0	134.0	262.0	121.0	130.0	172.0	162.1	
EFFLUENT (MG/L)	ND	ND	ND	9.5	ND	ND	ND	ND	ND	ND	2.0	ND	5.8	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	2.18	ND	ND	ND	ND	ND	ND	0.46	ND	1.33	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	187.0	226.0	110.0	208.0	150.0	269.0	124.0	101.0	367.0	101.0	83.0	118.0	170.3	
EFFLUENT (MG/L)	ND	ND	ND	32.8	ND	ND	ND	ND	ND	ND	8.2	ND	20.5	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	7.54	ND	ND	ND	ND	ND	ND	1.88	ND	4.72	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	8.9	8.0	7.0	10.2	8.2	8.9	8.0	6.3	13.0	7.5	5.9	6.2	8.2	
EFFLUENT (MG/L)	ND	ND	ND	0.8	ND	ND	ND	ND	ND	ND	0.6	ND	0.7	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	0.18	ND	ND	ND	ND	ND	ND	0.13	ND	0.16	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 CERTIFICATE OF APPROVAL ASSESSMENT

MUNICIPALITY : AYLMER
PLANT : AYLMER LAGOON
WORKS NUMBER : 110000891
TREATMENT : AERATED CELL PLUS LAGOON
: SUMMER STORAGE
: PHOSPHORUS REMOVAL-CONTINUOUS
DESIGN CAPACITY : 5.23 (1000 M3)

REGION : SOUTHWEST
DISTRICT : ELGIN
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : CATFISH CREEK
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 5,500

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	3.65	3.18	3.35	4.44	3.53	3.47	2.60	2.50	2.58	2.65	3.52	2.77	3.19	
LAGOON DISCHARGE	ND	ND	168.68	ND	199.59	ND	ND	ND	ND	ND	541.81	ND	303.36	
BOD														
INFLUENT (MG/L)	122.0	105.0	143.0	150.0	173.0	137.0	252.0	105.0	199.0	213.0	191.0	248.0	169.8	
EFFLUENT (MG/L)	ND	ND	18.4	ND	2.7	ND	ND	ND	ND	ND	1.5	ND	7.5	
CONCENTRATION LIMIT (MG/L)	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0		
LOADING (KG/D)	ND	ND	61.64	ND	9.53	ND	ND	ND	ND	ND	5.28	ND	23.93	
LOADING LIMIT (KG/D)														
SUSPENDED SOLIDS														
INFLUENT (MG/L)	125.0	81.0	87.0	156.0	86.0	75.0	101.0	80.0	100.0	70.0	75.0	88.0	93.7	
EFFLUENT (MG/L)	ND	ND	9.3	ND	4.0	ND	ND	ND	ND	ND	2.2	ND	5.2	
CONCENTRATION LIMIT (MG/L)	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0		
LOADING (KG/D)	ND	ND	31.15	ND	14.12	ND	ND	ND	ND	ND	7.74	ND	16.59	
LOADING LIMIT (KG/D)														
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	7.3	10.7	13.9	6.3	7.0	7.6	9.5	9.5	16.0	20.2	13.0	10.9	11.0	
EFFLUENT (MG/L)	ND	ND	0.8	ND	0.4	ND	ND	ND	ND	ND	0.4	ND	0.5	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	2.68	ND	1.41	ND	ND	ND	ND	ND	1.40	ND	1.60	
LOADING LIMIT (KG/D)														

SUMMARY

PARM	CRITERIA	LOADING	COMPLIES WITH CONC	COMPLIES WITH LOADING
BOD	25.0 MG/L	NA	YES	NA
SS	30.0 MG/L	NA	YES	NA
TP	1.0 MG/L	NA	YES	NA

NOTE:
BOD - ASSESSED MONTHLY
SS - ASSESSED MONTHLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : AYLMER
PLANT : AYLMER LAGOON
WORKS NUMBER : 110000891
TREATMENT : AERATED CELL PLUS LAGOON
: SUMMER STORAGE
: PHOSPHORUS REMOVAL-CONTINUOUS
DESIGN CAPACITY : 5.23 (1000 M3)

REGION : SOUTHWEST
DISTRICT : ELGIN
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : CATFISH CREEK
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 5,500

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	3.65	3.18	3.35	4.44	3.53	3.47	2.60	2.50	2.58	2.65	3.52	2.77	3.19	
LAGOON DISCHARGE	ND	ND	168.68	ND	199.59	ND	ND	ND	ND	ND	541.81	ND	303.36	
BOD5														
INFLUENT (MG/L)	122.0	105.0	143.0	150.0	173.0	137.0	252.0	105.0	199.0	213.0	191.0	248.0	169.8	
EFFLUENT (MG/L)	ND	ND	18.4	ND	2.7	ND	ND	ND	ND	ND	1.5	ND	7.5	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	61.64	ND	9.53	ND	ND	ND	ND	ND	5.28	ND	23.93	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	125.0	81.0	87.0	156.0	86.0	75.0	101.0	80.0	100.0	70.0	75.0	88.0	93.7	
EFFLUENT (MG/L)	ND	ND	9.3	ND	4.0	ND	ND	ND	ND	ND	2.2	ND	5.2	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	31.15	ND	14.12	ND	ND	ND	ND	ND	7.74	ND	16.59	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	7.3	10.7	13.9	6.3	7.0	7.6	9.5	9.5	16.0	20.2	13.0	10.9	11.0	
EFFLUENT (MG/L)	ND	ND	0.8	ND	0.4	ND	ND	ND	ND	ND	0.4	ND	0.5	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	2.68	ND	1.41	ND	ND	ND	ND	ND	1.40	ND	1.60	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	1.0 MG/L	YES

NO REMEDIAL MEASURES REPORTED

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY	: [illegible]MONT	REGION	: SOUTHWEST
PLANT	: [illegible]MONT LAGOON	DISTRICT	: ELGIN
WORKS NUMBER	: [illegible]	OPERATING AUTHORITY	: MINISTRY OF THE ENVIRONMENT
TREATMENT	: CONVENTIONAL LAGOON SEASONAL	WATERCOURSE	: KETTLE CREEK
	: [illegible] REMOVAL CONTINUOUS	MINOR BASIN	: ERIE
		MAJOR BASIN	: GREAT LAKES
DESIGN CAPACITY	: 0.68 (1000 M3)	POPULATION SERVED	: 1,150

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
[illegible] (1000 M3)	0.41	0.36	0.42	0.54	0.39	0.44	0.40	0.37	0.41	0.37	0.48	0.39	0.42	
[illegible] DISCHARGE	ND	ND	ND	64.80	ND	ND	ND	ND	ND	52.00	62.76	ND	59.85	
[illegible]														
INFLUENT (MG/L)	81.0	79.0	113.0	84.0	128.0	109.0	118.0	102.0	119.0	132.0	80.0	114.0	104.9	
EFFLUENT (MG/L)	ND	ND	ND	13.2	ND	ND	ND	ND	ND	3.0	3.5	ND	6.6	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	7.12	ND	ND	ND	ND	ND	1.11	1.68	ND	2.77	
[illegible] SOLIDS														
INFLUENT (MG/L)	87.0	112.0	116.0	58.0	83.0	123.0	97.0	94.0	105.0	125.0	72.0	238.0	109.2	
EFFLUENT (MG/L)	ND	ND	ND	12.5	ND	ND	ND	ND	ND	6.2	9.0	ND	9.2	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	6.75	ND	ND	ND	ND	ND	2.29	4.32	ND	3.86	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.2	6.5	7.6	4.8	6.7	7.4	6.2	5.5	6.8	8.5	5.0	606.0	56.4	
EFFLUENT (MG/L)	ND	ND	ND	1.3*	ND	ND	ND	ND	ND	0.6	0.1	ND	0.7	1
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	0.70	ND	ND	ND	ND	ND	0.22	0.04	ND	0.29	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	1.0 MG/L	NO

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES

	START DATE	END DATE	ANTICIPATED COMPLIANCE
OPERATIONAL/PROCESS - PHOSPHORUS REMOVAL BEING UPGRADED	1989/05	1989/10	1989/05
OPERATIONAL/PROCESS - CONDUCTING TREATABILITY STUDIES	1989/10	1990/12	

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : BLANDFORD-BLENHEIM
PLANT : PLATTSVILLE LAGOON
WORKS NUMBER : 110003022
TREATMENT : AERATED CELL PLUS LAGOON
: SEASONAL DISCHARGE
: PHOSPHORUS REMOVAL - BATCH
DESIGN CAPACITY : 0.59 (1000 M3)

REGION : SOUTHWEST
DISTRICT : OXFORD
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : NITH RIVER
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 795

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.42	0.45	0.46	0.42	0.34	0.42	0.36	0.42	0.33	0.37	0.40	0.38	0.40	
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BOD5														
INFLUENT (MG/L)	274.0	90.0	ND	130.0	ND	86.0	266.0	254.0	161.0	164.0	123.0	188.0	173.6	
EFFLUENT (MG/L)	ND	ND	ND	ND	18.2	ND	ND	ND	ND	ND	1.4	ND	9.8	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	6.18	ND	ND	ND	ND	ND	0.56	ND	3.92	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	300.0	101.0	ND	227.0	ND	115.0	474.0	162.0	191.0	159.0	113.0	146.0	198.8	
EFFLUENT (MG/L)	ND	ND	ND	ND	26.6	ND	ND	ND	ND	ND	6.8	ND	16.7	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	9.04	ND	ND	ND	ND	ND	2.72	ND	6.68	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	4.7	4.2	ND	5.1	ND	3.5	15.4	4.0	5.3	6.3	5.4	6.4	6.0	
EFFLUENT (MG/L)	ND	ND	ND	ND	0.6	ND	ND	ND	ND	ND	0.1	ND	0.4	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	ND	0.20	ND	ND	ND	ND	ND	0.04	ND	0.16	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES	START DATE	END DATE	ANTICIPATED COMPLIANCE
FACILITY EXPANSION/UPGRADING - ENGINEERING STUDY PHASE	1988/02	1990/01	

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : BLENHEIM
PLANT : BLENHEIM LAGOON
WORKS NUMBER : 1[illegible]066
TREATMENT : CONVENTIONAL LAGOON SEASONAL
: PHOSPHORUS REMOVAL - BATCH
:
DESIGN CAPACITY : 1.95 (1000 M3)

REGION : SOUTHWEST
DISTRICT : KENT
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : CAMERON DR - MCGREGOR CK
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 4,200

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.56	1.39	1.55	1.65	2.10	1.84	1.57	1.82	1.52	1.30	1.29	1.19	1.57	
LAGOON DISCHARGE	ND	ND	ND	255.59	ND	ND	ND	ND	ND	ND	354.40	ND	305.00	
BOD5														
INFLUENT (MG/L)	146.0	139.0	124.0	148.0	134.0	148.0	172.0	159.0	572.0	144.0	170.0	160.0	184.7	
EFFLUENT (MG/L)	ND	ND	ND	19.3	ND	ND	ND	ND	ND	ND	25.1	ND	22.2	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	31.64	ND	ND	ND	ND	ND	ND	32.37	ND	34.85	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	244.0	208.0	102.0	114.0	91.0	144.0	170.0	135.0	443.0	143.0	154.0	113.0	171.8	
EFFLUENT (MG/L)	ND	ND	ND	27.2	ND	ND	ND	ND	ND	ND	39.6	ND	33.4*	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	44.88	ND	ND	ND	ND	ND	ND	51.08	ND	52.44	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.0	8.3	7.4	8.2	7.0	7.6	6.7	7.7	10.0	7.6	8.4	8.2	7.8	
EFFLUENT (MG/L)	ND	ND	ND	0.6	ND	ND	ND	ND	ND	ND	0.6	ND	0.6	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	0.99	ND	ND	ND	ND	ND	ND	0.77	ND	0.94	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	NO
TP	1.0 MG/L	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES

	START DATE	END DATE	ANTICIPATED COMPLIANCE
FACILITY EXPANSION/UPGRADING - ENGINEERING STUDY PHASE	1988/02	1990/01	1990/04

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : BLYTH
PLANT : BLYTH WPCP
WORKS NUMBER : 110002247
TREATMENT : EXTENDED AERATION
: PHOSPHORUS REMOVAL-CONTINUOUS
: EFFLUENT POLISHING
DESIGN CAPACITY : 0.73 (1000 M3)

REGION : SOUTHWEST
DISTRICT : HURON
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : BLYTH CREEK
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 890

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.42	0.40	0.42	0.42	0.37	0.28	0.29	0.30	0.27	0.29	0.34	0.33	0.34	
BOD5														
INFLUENT (MG/L)	94.0	152.0	187.0	77.0	128.0	117.0	166.0	112.0	158.0	121.0	108.0	120.0	128.3	
EFFLUENT (MG/L)	1.1	3.7	1.9	2.3	2.6	2.3	2.2	1.3	1.2	1.8	6.0	2.1	2.4	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	0.46	1.48	0.79	0.96	0.96	0.64	0.63	0.39	0.32	0.52	2.04	0.69	0.82	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	153.0	180.0	306.0	70.0	124.0	98.0	255.0	215.0	191.0	130.0	91.0	192.0	167.1	
EFFLUENT (MG/L)	0.6	5.2	2.1	3.9	1.5	1.8	2.5	1.7	2.2	1.2	2.6	4.9	2.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	0.25	2.08	0.88	1.63	0.55	0.50	0.72	0.51	0.59	0.34	0.88	1.61	0.85	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.7	8.6	9.2	5.8	7.1	6.4	9.5	8.1	14.0	7.1	5.6	9.5	8.1	
EFFLUENT (MG/L)	0.2	0.7	0.2	0.4	0.2	0.2	0.3	0.2	0.4	0.2	0.3	0.3	0.3	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	0.08	0.28	0.08	0.16	0.07	0.05	0.08	0.06	0.10	0.05	0.10	0.09	0.10	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NO REMEDIAL MEASURES REPORTED

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : BRUSSELS
PLANT : BRUSSELS WPCP
WORKS NUMBER : 1110023354
TREATMENT : EXTENDED AERATION
: PHOSPHORUS REMOVAL CONTINUOUS
: EFFLUENT POLISHING
DESIGN CAPACITY : 0.88 (1000 M3)

REGION : SOUTHWEST
DISTRICT : HURON
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : MAITLAND RIVER
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 1,010

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.32	0.37	0.45	0.46	0.35	0.48	0.32	0.31	0.30	0.32	0.40	0.37	0.37	
BOD														
INFLUENT (MG/L)	93.0	174.0	159.0	277.0	169.0	121.0	51.0	48.0	128.0	137.0	189.0	261.0	150.6	
EFFLUENT (MG/L)	2.5	3.1	3.4	3.4	3.8	2.0	3.3	1.5	1.9	1.9	3.0	1.8	2.6	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	0.80	1.14	1.53	1.56	1.33	0.96	1.05	0.46	0.57	0.60	1.20	0.66	0.96	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	150.0	246.0	237.0	403.0	243.0	132.0	168.0	218.0	108.0	268.0	253.0	250.0	223.0	
EFFLUENT (MG/L)	1.3	1.9	2.8	2.1	1.8	1.2	2.2	2.8	1.9	1.7	2.6	4.6	2.2	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	0.41	0.70	1.26	0.96	0.63	0.57	0.70	0.86	0.57	0.54	1.04	1.70	0.81	
TOTAL PHOSPHORUS														
INFLUENT (MG/L)	6.9	12.6	9.7	18.3	11.2	8.5	9.6	10.4	8.6	11.3	10.8	12.5	10.9	
EFFLUENT (MG/L)	0.1	0.2	0.2	0.2	0.2	0.1	0.2	0.3	0.3	0.2	0.2	0.1	0.2	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	0.03	0.07	0.09	0.09	0.07	0.04	0.06	0.09	0.09	0.06	0.08	0.03	0.07	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NO REMEDIAL MEASURES REPORTED

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : CHATHAM
PLANT : CHATHAM WPCP
WORKS NUMBER : 110000098
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL-CONTINUOUS
: EFFLUENT POLISHING
DESIGN CAPACITY : 35.91 (1000 M3)

REGION : SOUTHWEST
DISTRICT : KENT
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : THAMES RIVER
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 41,000

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	21.12	22.35	25.45	31.40	31.09	30.41	24.53	26.13	26.74	27.12	27.29	22.16	26.32	
BOD5														
INFLUENT (MG/L)	127.0	171.0	178.0	187.0	161.0	131.0	136.0	137.0	155.0	145.0	180.0	195.0	158.6	
EFFLUENT (MG/L)	4.3	7.1	10.2	6.9	5.7	3.4	7.1	6.9	6.5	5.1	10.5	6.5	6.7	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	90.81	158.68	259.59	216.66	177.21	103.39	174.16	180.29	173.81	138.31	286.54	144.04	176.34	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	210.0	189.0	193.0	196.0	223.0	150.0	174.0	213.0	358.0	216.0	192.0	251.0	213.8	
EFFLUENT (MG/L)	9.1	12.6	23.7	14.8	13.2	13.2	20.5	26.2	26.8	25.1	22.1	12.7	18.3	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	192.19	281.61	603.16	464.72	410.38	401.41	502.86	684.60	716.63	680.71	603.10	281.43	481.66	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	13.3	17.1	13.8	11.1	11.7	10.4	11.8	8.8	9.6	8.1	12.6	10.3	11.6	
EFFLUENT (MG/L)	0.8	0.9	0.6	0.5	0.4	0.4	0.5	0.5	0.4	0.5	0.3	0.5	0.5	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	16.89	20.11	15.27	15.70	12.43	12.16	12.26	13.06	10.69	13.56	8.18	11.08	13.16	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : CHESLEY
PLANT : CHESLEY LAGOON
WORKS NUMBER : 1140010
TREATMENT : CONVENTIONAL LAGOON CONTINUOUS
: PHOSPHORUS REMOVAL CONTINUOUS
:
DESIGN CAPACITY : 1.45 (1000 M3)

REGION : SOUTHWEST
DISTRICT : BRUCE
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : NORTH SAUGEEN RIVER
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 1,883

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.67	0.48	1.17	0.76	0.85	0.82	0.66	0.63	0.76	0.72	1.10	0.86	0.79	
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BOD5														
INFLUENT (MG/L)	96.0	122.0	144.0	90.0	93.0	78.0	118.0	67.0	113.0	73.0	49.0	85.0	94.0	
EFFLUENT (MG/L)	6.4	4.7	11.5	23.6	21.6	2.8	1.8	0.1	5.0	2.2	2.2	5.1	7.1	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	4.28	2.25	13.45	17.93	18.36	2.29	1.18	0.06	2.28	1.58	2.42	4.38	5.61	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	145.0	165.0	45.0	82.0	104.0	174.0	209.0	82.0	104.0	97.0	58.0	267.0	127.7	
EFFLUENT (MG/L)	6.6	9.0	7.2	7.6	22.6	2.9	32.3	2.3	2.6	2.0	3.8	5.1	8.5	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	4.42	4.32	8.42	5.77	19.21	2.37	21.31	1.44	1.97	1.44	4.18	2.66	6.72	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.1	7.4	2.5	5.2	4.4	5.0	7.1	4.7	8.5	5.4	2.4	4.5	5.3	
EFFLUENT (MG/L)	1.1*	1.5*	1.8*	1.0	0.9	1.6*	1.0	0.5	0.8	0.6	0.4	0.3	1.0	4
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	0.73	0.72	2.10	0.76	0.76	1.31	0.66	0.31	0.60	0.43	0.44	0.25	0.79	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	1.0 MG/L	NO

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES	START DATE	END DATE	ANTICIPATED COMPLIANCE
OPERATIONAL/PROCESS - PHOSPHORUS REMOVAL BEING UPGRADED			1989/09

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : CLEARWATER TOWN
PLANT : BRIGHT'S GROVE LAGOON
WORKS NUMBER : 110001989
TREATMENT : CONVENTIONAL LAGOON SEASONAL
:
:
DESIGN CAPACITY : 1.75 (1000 M3)

REGION : SOUTHWEST
DISTRICT : LAMBTON
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : CREEK TO L.HURON
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 4,150

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.21	1.09	1.24	1.21	1.30	1.20	1.17	1.13	1.27	1.25	1.30	1.21	1.22	
LAGOON DISCHARGE	ND	ND	ND	ND	128.70	ND	ND	ND	ND	ND	ND	ND	128.70	
BOD5														
INFLUENT (MG/L)	208.0	179.0	285.0	292.0	91.0	146.0	103.0	141.0	388.0	133.0	176.0	225.0	197.3	
EFFLUENT (MG/L)	ND	ND	ND	ND	8.3	ND	ND	ND	ND	2.8	ND	ND	5.6	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	ND	10.79	ND	ND	ND	ND	3.50	ND	ND	6.83	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	590.0	194.0	1,885.0	1,208.0	80.0	232.0	103.0	124.0	94.0	101.0	110.0	71.0	399.3	
EFFLUENT (MG/L)	ND	ND	ND	ND	15.6	ND	ND	ND	ND	30.0	ND	ND	22.8	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	ND	20.28	ND	ND	ND	ND	37.50	ND	ND	27.82	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	14.5	8.0	25.0	15.6	6.7	8.9	7.4	8.0	9.7	7.8	8.0	10.7	10.9	
EFFLUENT (MG/L)	ND	ND	ND	ND	2.3	ND	ND	ND	ND	4.5	ND	ND	3.4	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	2.99	ND	ND	ND	ND	5.62	ND	ND	4.15	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	NA	NA

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES	START DATE	END DATE	ANTICIPATED COMPLIANCE
FACILITY EXPANSION/UPGRADING - ENGINEERING STUDY PHASE	1988/02	1990/01	

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : CLINTON
PLANT : CLINTON WPCP
WORKS NUMBER : 1[illegible]0925
TREATMENT : CONTACT STABILIZATION
: PHOSPHORUS REMOVAL CONTINUOUS
: EFFLUENT FILTRATION
DESIGN CAPACITY : 1.81 (1000 M3)

REGION : SOUTHWEST
DISTRICT : HURON
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : BAYFIELD RIVER
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 3,000

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	2.20	1.76	2.00	2.65	1.69	1.50	0.99	1.00	1.04	1.21	1.80	1.60	1.62	
BOD:														
INFLUENT (MG/L)	79.0	84.0	78.0	60.0	106.0	143.0	141.0	127.0	125.0	137.0	93.0	111.0	107.0	
EFFLUENT (MG/L)	7.0	4.0	5.6	6.8	4.7	1.5	5.4	0.7	2.3	0.9	3.1	2.6	3.7	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	15.40	7.04	11.20	18.02	7.94	2.25	5.34	0.70	2.39	1.08	5.58	4.16	5.99	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	85.0	101.0	80.0	46.0	93.0	219.0	118.0	146.0	130.0	187.0	82.0	71.0	113.2	
EFFLUENT (MG/L)	5.0	3.5	3.8	9.6	6.1	3.2	3.5	0.3	3.2	2.0	2.6	2.1	3.7	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	11.00	6.16	7.60	25.44	10.30	4.80	3.46	0.30	3.32	2.42	4.68	3.36	5.99	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	3.8	5.0	4.2	2.7	3.9	6.1	6.9	6.2	6.9	6.9	5.1	4.6	5.2	
EFFLUENT (MG/L)	0.6	0.5	0.6	0.6	0.7	0.6	0.6	0.8	0.5	0.3	0.4	0.4	0.6	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	1.32	0.88	1.20	1.59	1.18	0.90	0.59	0.80	0.52	0.36	0.72	0.64	0.97	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : COLCHESTER SOUTH
PLANT : COLCHESTER SOUTH TWP (OP APRIL 89)
WORKS NUMBER : 110002595
TREATMENT : AERATED LAGOON
: CONTINUOUS DISCHARGE
: PHOSPHORUS REMOVAL-CONTINUOUS
DESIGN CAPACITY : 1.81 (1000 M3)

REGION : SOUTHWEST
DISTRICT : ESSEX
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : LAKE ERIE
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 2,058

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	ND	ND	ND	ND	ND	ND	1.16	0.91	0.90	0.71	0.62	0.45	0.79	
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	36.05	28.31	26.97	21.87	18.55	13.98	24.29	
BOD5														
INFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	14.0	43.0	5.0	100.0	94.0	76.0	55.3	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	0.1	1.2	1.2	1.0	1.4	2.0	1.2	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	0.11	1.09	1.08	0.71	0.86	0.90	0.95	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	32.0	167.0	4.0	73.0	207.0	75.0	93.0	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	3.7	0.6	2.0	2.6	1.5	2.8	2.2	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	4.29	0.54	1.80	1.84	0.93	1.26	1.74	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	1.3	2.1	0.4	2.7	4.7	3.5	2.5	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND				0.1		0.1		
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	ND	ND	ND				0.07		0.04		

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	INSUFFICIENT DATA
SS	40.0 MG/L	INSUFFICIENT DATA
TP	1.0 MG/L	INSUFFICIENT DATA

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 CERTIFICATE OF APPROVAL ASSESSMENT

MUNICIPALITY : COLLINGWOOD TWP
PLANT : CRAIGLEITH WWTP
WORKS NUMBER : [illegible]
TREATMENT : EXTENDED AERATION
: PHOSPHORUS REMOVAL CONTINUOUS
: EFFLUENT FILTRATION
DESIGN CAPACITY : 4.87 (1000 M3)

REGION : SOUTHWEST
DISTRICT : GREY
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : GEORGIAN BAY
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 3,000

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.01	0.91	1.13	0.82	0.84	1.00	1.00	1.03	0.80	0.81	0.90	1.06	0.94	
BOD5														
INFLUENT (MG/L)	19.0	58.0	44.0	65.0	18.0	48.0	24.0	ND	11.0	206.0	16.0	16.0	47.7	
EFFLUENT (MG/L)	1.0	0.7	1.9	1.2	2.0	1.4	0.7	ND	1.6	1.1	1.2	1.1	1.3	
CONCENTRATION LIMIT (MG/L)													15.0	
LOADING (KG/D)	1.01	0.63	2.14	0.98	1.68	1.40	0.70	ND	1.28	0.89	1.08	1.16	1.22	
LOADING LIMIT (KG/D)													61.20	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	65.0	71.0	59.0	46.0	65.0	42.0	64.0	105.0	43.0	124.0	65.0	146.0	74.6	
EFFLUENT (MG/L)	2.2	4.3	1.9	0.5	1.8	0.5	1.3	3.3	2.5	0.6	0.8	1.0	1.7	
CONCENTRATION LIMIT (MG/L)													15.0	
LOADING (KG/D)	2.22	3.91	2.14	0.41	1.51	0.50	1.30	3.39	2.00	0.48	0.72	1.06	1.60	
LOADING LIMIT (KG/D)													61.20	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	2.0	2.9	2.3	1.7	1.6	2.3	2.1	2.6	2.8	4.6	1.8	3.1	2.5	
EFFLUENT (MG/L)	0.3	0.3	0.1	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.2	0.3	0.3	
CONCENTRATION LIMIT (MG/L)													0.3	
LOADING (KG/D)	0.30	0.27	0.11	0.16	0.16	0.20	0.30	0.30	0.24	0.24	0.18	0.31	0.28	
LOADING LIMIT (KG/D)													1.22	

SUMMARY

PARM	CRITERIA	LOADING	COMPLIES WITH CONC	COMPLIES WITH LOADING
BOD	15.0 MG/L	61.20 KG/D	YES	YES
SS	15.0 MG/L	61.20 KG/D	YES	YES
TP	0.3 MG/L	1.22 KG/D	YES	YES

NO REMEDIAL MEASURES REPORTED

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED ANNUALLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (E.G. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : COLLINGWOOD TWP
PLANT : CRAIGLEIGH WPCP
WORKS NUMBER : 120001951
TREATMENT : EXTENDED AERATION
: PHOSPHORUS REMOVAL-CONTINUOUS
: EFFLUENT FILTRATION
DESIGN CAPACITY : 4.07 (1000 M3)

REGION : SOUTHWEST
DISTRICT : GREY
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : GEORGIAN BAY
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 3,000

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.01	0.91	1.13	0.82	0.84	1.00	1.00	1.03	0.80	0.81	0.90	1.06	0.94	
BOD5														
INFLUENT (MG/L)	19.0	58.0	44.0	65.0	18.0	48.0	24.0	ND	11.0	206.0	16.0	16.0	47.7	
EFFLUENT (MG/L)	1.0	0.7	1.9	1.2	2.0	1.4	0.7	ND	1.6	1.1	1.2	1.1	1.3	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	1.01	0.63	2.14	0.98	1.68	1.40	0.70	ND	1.28	0.89	1.08	1.16	1.22	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	65.0	71.0	59.0	46.0	65.0	42.0	64.0	105.0	43.0	124.0	65.0	146.0	74.6	
EFFLUENT (MG/L)	2.2	4.3	1.9	0.5	1.8	0.5	1.3	3.3	2.5	0.6	0.8	1.0	1.7	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	2.22	3.91	2.14	0.41	1.51	0.50	1.30	3.39	2.00	0.48	0.72	1.06	1.60	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	2.0	2.9	2.3	1.7	1.6	2.3	2.1	2.6	2.8	4.6	1.8	3.1	2.5	
EFFLUENT (MG/L)	0.3	0.3	0.1	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.2	0.3	0.3	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	0.30	0.27	0.11	0.16	0.16	0.20	0.30	0.30	0.24	0.24	0.18	0.31	0.28	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED ANNUALLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : DOVER
PLANT : MITCHELL'S BAY LAGOON
WORKS NUMBER : 110[illegible]
TREATMENT : CONVENTIONAL LAGOON SEASONAL
: PHOSPHORUS REMOVAL - BATCH
:
DESIGN CAPACITY : 0.50 (1000 M3)

REGION : SOUTHWEST
DISTRICT : KENT
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : LAKE ST. CLAIR
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 378

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.10	0.10	0.10	0.14	0.14	0.20	0.18	0.15	0.15	0.14	0.41	0.11	0.16	
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.19	ND	ND	6.19	
BOD5														
INFLUENT (MG/L)	205.0	94.0	160.0	59.0	110.0	59.0	96.0	65.0	ND	14.0	84.0	ND	94.6	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.0	ND	ND	4.0	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.56	ND	ND	0.64	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	168.0	85.0	193.0	89.0	86.0	80.0	130.0	144.0	ND	59.0	65.0	ND	109.9	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	100.3	ND	ND	100.3*	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	14.04	ND	ND	16.05	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.5	6.2	11.3	ND	4.1	5.8	6.8	2.8	ND	0.9	3.5	ND	5.3	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2	ND	ND	0.2	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.02	ND	ND	0.03	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	NO
TP	1.0 MG/L	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES

	START DATE	END DATE	ANTICIPATED COMPLIANCE
FACILITY EXPANSION/UPGRADING - ENGINEERING STUDY PHASE	1988/02	1990/01	1990/04

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : DRESDEN
PLANT : DRESDEN WPCP
WORKS NUMBER : 110002014
TREATMENT : EXTENDED AERATION
: PHOSPHORUS REMOVAL-CONTINUOUS
:
DESIGN CAPACITY : 4.54 (1000 M3)

REGION : SOUTHWEST
DISTRICT : KENT
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : SYDENHAM RIVER
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 2,568

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.64	1.73	1.46	1.55	1.40	1.66	1.41	1.55	2.02	1.56	1.92	2.16	1.67	
BOD5														
INFLUENT (MG/L)	147.0	162.0	90.0	152.0	122.0	69.0	116.0	57.0	35.0	69.0	153.0	64.0	103.0	
EFFLUENT (MG/L)	5.1	8.5	10.2	9.2	15.6	14.1	3.6	23.2	11.7	6.0	9.2	7.8	10.4	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	8.36	14.70	14.89	14.26	21.84	23.40	5.07	35.96	23.63	9.36	17.66	16.84	17.37	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	287.0	111.0	188.0	261.0	337.0	315.0	136.0	125.0	42.0	350.0	144.0	136.0	202.7	
EFFLUENT (MG/L)	17.0	13.3	21.1	21.1	19.8	20.7	12.7	26.8	13.4	19.2	17.4	12.3	17.9	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	27.88	23.00	30.80	32.70	27.72	34.36	17.90	41.54	27.06	29.95	33.40	26.56	29.89	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	4.6	2.9	1.1	1.5	4.4	2.9	2.9	3.0	2.8	7.7	3.4	2.8	3.3	
EFFLUENT (MG/L)	0.3	0.3	0.2	0.2	0.3	0.4	0.3	0.6	0.8	0.6	1.2*	0.2	0.5	1
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	0.49	0.51	0.29	0.31	0.42	0.66	0.42	0.93	1.61	0.93	2.30	0.43	0.84	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	NO

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES

	START DATE	END DATE	ANTICIPATED COMPLIANCE
COLLECTION SYSTEM - ENFORCING SEWER-USE BYLAWS	1988		
SLUDGE DISPOSAL/REMOVAL - UPGRADING WASTE DISPOSAL SITE	1988		

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : DUNDALK
PLANT : DUNDALK LAGOON
WORKS NUMBER : 110001471
TREATMENT : AERATED CELL PLUS LAGOON
: SUMMER STORAGE
: PHOSPHORUS REMOVAL CONTINUOUS
DESIGN CAPACITY 1.05 (1000 M3)

REGION : SOUTHWEST
DISTRICT : GREY
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : TOLEY DRAIN TO GRAND R.
MINOR BASIN : FRIE
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 1,400

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.92	0.79	1.26	1.35	0.97	0.98	0.65	0.62	0.63	0.73	1.07	0.80	0.90	
LAGOON DISCHARGE	80.02	29.21	37.20	57.68	ND	ND	ND	ND	ND	ND	9.76	61.88	45.96	
BOD5														
INFLUENT (MG/L)	74.0	163.0	138.0	44.0	40.0	39.0	40.0	48.0	56.0	68.0	73.0	75.0	71.5	
EFFLUENT (MG/L)	2.2	4.0	11.2	16.5	ND	ND	ND	ND	ND	ND	2.2	2.0	6.4	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	2.02	3.16	14.11	22.27	ND	ND	ND	ND	ND	ND	2.35	1.60	5.76	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	91.0	189.0	218.0	47.0	31.0	52.0	47.0	108.0	140.0	147.0	153.0	112.0	111.3	
EFFLUENT (MG/L)	6.9	8.7	15.8	25.2	ND	ND	ND	ND	ND	ND	9.3	4.5	11.7	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	6.34	6.87	19.90	34.02	ND	ND	ND	ND	ND	ND	9.95	3.60	10.53	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	3.5	8.5	10.9	3.1	2.7	3.8	2.9	4.3	4.6	4.9	4.8	7.4	5.1	
EFFLUENT (MG/L)	0.4	0.2	0.7	0.6	ND	ND	ND	ND	ND	ND	0.3	0.7	0.5	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	0.36	0.15	0.88	0.81	ND	ND	ND	ND	ND	ND	0.32	0.56	0.45	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : DURHAM
PLANT : DURHAM MUN WPCP
WORKS NUMBER : 110000999
TREATMENT : EXTENDED AERATION
: PHOSPHORUS REMOVAL-CONTINUOUS
:
DESIGN CAPACITY : 2.18 (1000 M3)

REGION : SOUTHWEST
DISTRICT : GREY
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : SAUGEEN RIVER
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 2,332

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.93	0.87	0.99	1.15	0.99	0.96	0.83	0.80	0.79	0.83	0.79	1.00	0.91	
BOD5														
INFLUENT (MG/L)	161.0	153.0	194.0	192.0	195.0	193.0	227.0	154.0	ND	218.0	132.0	135.0	177.6	
EFFLUENT (MG/L)	4.4	3.2	3.8	4.0	0.9	2.3	1.6	1.3	ND	0.9	ND	2.6	2.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	4.09	2.78	3.76	4.60	0.89	2.20	1.32	1.04	ND	0.74	ND	2.60	2.28	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	532.0	514.0	595.0	773.0	501.0	1,025.0	812.0	450.0	ND	710.0	536.0	408.0	623.3	
EFFLUENT (MG/L)	16.4	22.7	13.2	11.6	7.4	7.4	5.0	4.2	ND	7.9	ND	11.8	10.8	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	15.25	19.74	13.06	13.34	7.32	7.10	4.15	3.36	ND	6.55	ND	11.80	9.83	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	10.7	8.3	9.9	11.8	9.4	10.5	11.2	7.1	ND	13.6	10.6	6.7	10.0	
EFFLUENT (MG/L)	0.5	0.7	0.3	0.4	0.1	0.2	0.2	0.2	ND	0.3	ND	0.5	0.3	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	0.46	0.60	0.29	0.46	0.09	0.19	0.16	0.16	ND	0.24	ND	0.50	0.27	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NO REMEDIAL MEASURES REPORTED

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : DUTTON
PLANT : DUTTON LAGOON
WORKS NUMBER : 210001266
TREATMENT : CONVENTIONAL LAGOON SEASONAL
: PHOSPHOROUS REMOVAL - BATCH

DESIGN CAPACITY : 0.31 (1000 M3)

REGION : SOUTHWEST
DISTRICT : ELGIN
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : BENNETT CK. TO L. ERIE
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 977

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.36	0.38	0.40	0.43	0.46	0.47	0.59	0.46	0.46	0.46	0.47	0.47	0.45	
LAGOON DISCHARGE	ND	ND	ND	42.41	ND	ND	ND	ND	ND	46.30	ND	ND	44.36	
BOD5														
INFLUENT (MG/L)	200.0	148.0	131.0	183.0	82.0	145.0	222.0	301.0	164.0	193.0	34.0	ND	163.9	
EFFLUENT (MG/L)	ND	ND	ND	15.5	ND	ND	ND	ND	ND	10.1	ND	ND	12.8	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	6.66	ND	ND	ND	ND	ND	4.64	ND	ND	5.76	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	135.0	131.0	107.0	116.0	41.0	168.0	140.0	136.0	181.0	334.0	24.0	ND	137.5	
EFFLUENT (MG/L)	ND	ND	ND	34.1	ND	ND	ND	ND	ND	39.2	ND	ND	36.7*	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	14.66	ND	ND	ND	ND	ND	18.03	ND	ND	16.52	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	8.6	7.6	9.2	7.2	4.8	7.9	9.6	7.9	9.7	8.6	2.6	ND	7.6	
EFFLUENT (MG/L)	ND	ND	ND	0.7	ND	ND	ND	ND	ND	0.5	ND	ND	0.6	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	0.30	ND	ND	ND	ND	ND	0.23	ND	ND	0.27	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	NO
TP	1.0 MG/L	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES	START DATE	END DATE	ANTICIPATED COMPLIANCE
FACILITY EXPANSION/UPGRADING - FINAL DESIGN PHASE	1988	1991/12	1991/12

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : EAST WILLIAMS
PLANT : AILSA CRAIG WPCP
WORKS NUMBER : 110002050
TREATMENT : EXTENDED AERATION
: PHOSPHORUS REMOVAL-CONTINUOUS
:
DESIGN CAPACITY : 0.60 (1000 M3)

REGION : SOUTHWEST
DISTRICT : MIDDLESEC
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : AUSABLE RIVER
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 897

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.45	0.42	0.42	0.46	0.36	0.33	0.25	0.26	0.27	0.28	0.33	0.32	0.35	
BOD5														
INFLUENT (MG/L)	126.0	144.0	142.0	127.0	129.0	140.0	114.0	123.0	175.0	141.0	117.0	106.0	132.0	
EFFLUENT (MG/L)	4.6	3.4	5.8	7.1	2.0	3.0	2.0	2.4	2.4	2.4	4.5	1.8	3.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	2.07	1.42	2.43	3.26	0.72	0.99	0.50	0.62	0.64	0.67	1.48	0.57	1.23	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	196.0	220.0	158.0	121.0	151.0	190.0	137.0	136.0	227.0	138.0	89.0	167.0	160.8	
EFFLUENT (MG/L)	9.3	9.6	12.4	6.4	8.3	13.4	7.3	10.3	9.5	10.3	15.6	1.2	9.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	4.18	4.03	5.20	2.94	2.98	4.42	1.82	2.67	2.56	2.88	5.14	0.38	3.33	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	7.4	8.1	6.4	6.2	14.1	8.6	6.3	6.4	8.9	7.5	6.1	8.3	7.9	
EFFLUENT (MG/L)	0.4	0.4	0.6	0.5	0.4	0.6	1.0	1.4*	0.8	0.7	0.7	0.7	0.7	1
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	0.18	0.16	0.25	0.23	0.14	0.19	0.25	0.36	0.21	0.19	0.23	0.22	0.25	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	NO

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES	START DATE	END DATE	ANTICIPATED COMPLIANCE
OPERATIONAL/PROCESS - PHOSPHORUS REMOVAL BEING UPGRADED	1988/07		1989/09

1989 CERTIFICATE OF APPROVAL ASSESSMENT

MUNICIPALITY : EAST ZORRA-TAVISTOCK
PLANT : TAVISTOCK LAGOON
WORKS NUMBER : 110000720
TREATMENT : AERATED CELL PLUS LAGOON
: SEASONAL DISCHARGE
: PHOSPHORUS REMOVAL CONTINUOUS
DESIGN CAPACITY : 0.27 (1000 M3)

REGION : SOUTHWEST
DISTRICT : OXFORD
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : TRIBUTARY TO THAMES R.
MINOR BASIN : FRD
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 1,952

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.02	0.91	0.96	1.14	0.91	1.13	0.83	0.81	0.76	0.85	0.94	0.90	0.93	
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	23.80	23.80	
BOD5														
INFLUENT (MG/L)	ND	ND	233.0	156.0	188.0	206.0	398.0	378.0	259.0	327.0	330.0	160.0	263.5	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.8	4.8	
CONCENTRATION LIMIT (MG/L)	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0		
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.42	4.46	
LOADING LIMIT (KG/D)														
SUSPENDED SOLIDS														
INFLUENT (MG/L)	ND	ND	105.0	82.0	126.0	187.0	227.0	172.0	155.0	203.0	196.0	106.0	155.9	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	34.5*	34.5	1
CONCENTRATION LIMIT (MG/L)	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0		
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	31.05	32.09	
LOADING LIMIT (KG/D)														
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	ND	ND	8.0	6.3	12.1	16.5	29.9	27.0	18.9	12.5	19.8	11.9	16.3	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2	0.2	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.18	0.19	
LOADING LIMIT (KG/D)														

SUMMARY

PARM	CRITERIA	LOADING	COMPLIES WITH CONC	COMPLIES WITH LOADING
BOD	25.0 MG/L	NA	YES	NA
SS	25.0 MG/L	NA	NO	NA
TP	1.0 MG/L	NA	YES	NA

NOTE:
BOD - ASSESSED MONTHLY
SS - ASSESSED MONTHLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : EAST ZORRA-TAVISTOCK
PLANT : TAVISTOCK LAGOON
WORKS NUMBER : 110000720
TREATMENT : AERATED CELL PLUS LAGOON
: SEASONAL DISCHARGE
: PHOSPHORUS REMOVAL-CONTINUOUS
DESIGN CAPACITY : 0.77 (1000 M3)

REGION : SOUTHWEST
DISTRICT : OXFORD
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : TRIBUTARY TO THAMES R.
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 1,952

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.02	0.91	0.96	1.14	0.91	1.13	0.83	0.81	0.76	0.85	0.94	0.90	0.93	
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	23.80	23.80	
BOD5														
INFLUENT (MG/L)	ND	ND	233.0	156.0	188.0	206.0	398.0	378.0	259.0	327.0	330.0	160.0	263.5	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.8	4.8	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.32	4.46	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	ND	ND	105.0	82.0	126.0	187.0	227.0	172.0	155.0	203.0	196.0	106.0	155.9	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	34.5*	34.5	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	31.05	32.09	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	ND	ND	8.0	6.3	12.1	16.5	29.9	27.0	18.9	12.5	19.8	11.9	16.3	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2	0.2	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.18	0.19	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY	: ENNISKILLEN	REGION	: SOUTHWEST
PLANT	: OIL CITY LAGOON	DISTRICT	: LAMBTON
WORKS NUMBER	: 110002758	OPERATING AUTHORITY	: MINISTRY OF THE ENVIRONMENT
TREATMENT	: CONVENTIONAL LAGOON SEASONAL	WATERCOURSE	: BLACK CREEK
	: PHOSPHORUS REMOVAL BATCH	MINOR BASIN	: ERIE
	:	MAJOR BASIN	: GREAT LAKES
DESIGN CAPACITY	: 0.18 (1000 M3)	POPULATION SERVED	: 120

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.06	0.05	0.05	0.07	0.05	0.06	0.05	0.05	0.06	0.06	0.07	0.06	0.06	
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BOD5														
INFLUENT (MG/L)	93.0	107.0	46.0	94.0	130.0	132.0	125.0	162.0	129.0	137.0	118.0	74.0	112.3	
EFFLUENT (MG/L)	ND	ND	ND	4.0	ND	ND	ND	ND	ND	ND	ND	ND	4.0	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	0.28	ND	ND	ND	ND	ND	ND	ND	ND	0.24	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	70.0	89.0	43.0	53.0	75.0	83.0	76.0	84.0	61.0	110.0	63.0	37.0	70.3	
EFFLUENT (MG/L)	ND	ND	ND	5.5	ND	ND	ND	ND	ND	ND	ND	ND	5.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	0.38	ND	ND	ND	ND	ND	ND	ND	ND	0.33	
TOTAL PHOSPHORUS														
INFLUENT (MG/L)	6.3	9.6	4.9	5.8	7.9	8.8	8.7	7.9	7.9	7.2	6.7	4.8	7.2	
EFFLUENT (MG/L)	ND	ND	ND	0.1	ND	ND	ND	ND	ND	ND	ND	ND	0.1	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	0.01	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES	START DATE	END DATE	ANTICIPATED COMPLIANCE
FACILITY EXPANSION/UPGRADING - ENGINEERING STUDY PHASE	1988/02	1990/01	

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : ESSEX
PLANT : ESSEX LAGOON N.E.
WORKS NUMBER : 110000203
TREATMENT : CONVENTIONAL LAGOON SEASONAL
: PHOSPHORUS REMOVAL-CONTINUOUS
:
DESIGN CAPACITY : 2.88 (1000 M3)

REGION : SOUTHWEST
DISTRICT : ESSEX
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : PUCE RIVER DRAIN
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 3,850

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.34	1.17	1.32	1.51	1.34	1.60	1.53	1.20	1.42	1.34	1.39	1.32	1.37	
LAGOON DISCHARGE	ND	ND	ND	261.14	ND	ND	ND	ND	ND	ND	289.45	ND	275.30	
BOD5														
INFLUENT (MG/L)	31.0	25.0	78.0	20.0	44.0	39.0	43.0	112.0	85.0	63.0	ND	50.0	53.6	
EFFLUENT (MG/L)	ND	ND	ND	10.9	ND	ND	ND	ND	ND	ND	8.5	ND	9.7	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	16.45	ND	ND	ND	ND	ND	ND	11.81	ND	13.29	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	69.0	41.0	102.0	74.0	48.0	51.0	114.0	71.0	148.0	63.0	ND	46.0	75.2	
EFFLUENT (MG/L)	ND	ND	ND	23.8	ND	ND	ND	ND	ND	ND	19.2	ND	21.5	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	35.93	ND	ND	ND	ND	ND	ND	26.68	ND	29.46	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	2.1	1.7	4.1	1.4	2.2	1.6	3.0	4.2	6.5	2.7	ND	3.4	3.0	
EFFLUENT (MG/L)	ND	ND	ND	0.3	ND	ND	ND	ND	ND	ND	0.4	ND	0.4	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	0.45	ND	ND	ND	ND	ND	ND	0.55	ND	0.55	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	1.0 MG/L	YES

NO REMEDIAL MEASURES REPORTED

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : ESSEX
PLANT : ESSEX LAGOON S.W.
WORKS NUMBER : 1100000837
TREATMENT : CONVENTIONAL LAGOON-SEASONAL
: PHOSPHORUS REMOVAL-CONTINUOUS
:
DESIGN CAPACITY : 1.52 (1000 M3)

REGION : SOUTHWEST
DISTRICT : ESSEX
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : CANARD RIVER
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 2401

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVE. DAILY FLOW (1000 M3)	0.94	0.89	0.94	1.11	1.07	1.85	2.02	0.98	1.05	0.85	1.01	0.79	1.13	
LAGOON DISCHARGE	ND	ND	ND	116.76	ND	ND	ND	ND	ND	ND	74.86	ND	95.81	
BOD5														
INFLUENT (MG/L)	115.0	166.0	155.0	141.0	306.0	135.0	269.0	150.0	157.0	180.0	ND	168.0	176.5	
EFFLUENT (MG/L)	ND	ND	ND	18.8	ND	ND	ND	ND	ND	ND	10.0	ND	14.4	
CONCENTRATION LIMIT (MG/L)													20.0	
LOADING (KG/D)	ND	ND	ND	20.86	ND	ND	ND	ND	ND	ND	10.10	ND	16.27	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	111.0	169.0	154.0	125.0	235.0	269.0	344.0	101.0	200.0	187.0	ND	449.0	213.1	
EFFLUENT (MG/L)	ND	ND	ND	37.2	ND	ND	ND	ND	ND	ND	20.3	ND	28.8	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	41.29	ND	ND	ND	ND	ND	ND	20.50	ND	32.54	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	7.0	8.9	8.6	7.3	8.0	6.9	8.5	6.6	8.0	6.4	ND	6.7	7.5	
EFFLUENT (MG/L)	ND	ND	ND	0.4	ND	ND	ND	ND	ND	ND	0.3	ND	0.4	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	0.44	ND	ND	ND	ND	ND	ND	0.30	ND	0.45	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	1.0 MG/L	YES

NO REMEDIAL MEASURES REPORTED

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : EXETER
PLANT : EXETER LAGOON
WORKS NUMBER : 110000221
TREATMENT : AERATED LAGOON
: PHOSPHORUS REMOVAL-CONTINUOUS
: SUMMER STORAGE
DESIGN CAPACITY : 3.39 (1000 M3)

REGION : SOUTHWEST
DISTRICT : HURON
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : AUSABLE RIVER
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 3,750

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	2.59	1.87	2.81	2.86	1.99	1.93	2.40	3.23	3.58	1.64	2.69	1.61	2.43	
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BOD5														
INFLUENT (MG/L)	117.0	139.0	84.0	82.0	138.0	67.6	51.0	35.0	96.0	97.0	145.0	288.0	111.6	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.7	ND	5.7	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	15.33	ND	13.85	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	201.0	185.0	111.0	76.0	151.0	47.6	51.0	63.0	119.0	121.0	85.0	ND	110.1	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	ND	1.1	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.95	ND	2.67	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.8	5.7	5.4	4.0	6.1	4.0	3.6	3.6	5.1	3.2	4.5	14.2	5.5	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9	ND	0.9	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.42	ND	2.19	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : FOREST
PLANT : FOREST LAGOON
WORKS NUMBER : 110001346
TREATMENT : CONVENTIONAL LAGOON SEASONAL
DESIGN CAPACITY : 1.36 (1000 M3)

REGION : SOUTHWEST
DISTRICT : LAMBTON
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : HICKORY CREEK
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 2,560

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.22	1.17	1.27	1.26	1.23	1.18	1.13	1.09	1.10	1.11	1.20	1.10	1.17	
LAGOON DISCHARGE	ND	ND	ND	ND	156.00	ND	ND	ND	ND	88.26	ND	ND	122.13	
BOD5														
INFLUENT (MG/L)	208.0	139.0	114.0	115.0	324.0	110.0	262.0	118.0	25.0	208.0	764.0	366.0	229.4	
EFFLUENT (MG/L)	ND	ND	ND	ND	15.3	ND	ND	ND	ND	13.6	ND	ND	14.5	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	ND	18.81	ND	ND	ND	ND	15.09	ND	ND	16.97	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	341.0	178.0	168.0	197.0	508.0	125.0	341.0	366.0	982.0	231.0	534.0	454.0	368.8	
EFFLUENT (MG/L)	ND	ND	ND	ND	24.5	ND	ND	ND	ND	124.9	ND	ND	74.7*	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	ND	30.13	ND	ND	ND	ND	138.63	ND	ND	87.40	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	10.9	5.1	5.9	4.3	11.7	6.2	9.3	4.8	8.7	6.6	12.2	8.4	7.8	
EFFLUENT (MG/L)	ND	ND	ND	ND	0.5	ND	ND	ND	ND	1.0	ND	ND	0.8	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	0.61	ND	ND	ND	ND	1.11	ND	ND	0.94	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	NO
TP	NA	NA

NOTE:
BOD ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (E.G. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES	START DATE	END DATE	ANTICIPATED COMPLIANCE
FACILITY EXPANSION/UPGRADING - ENGINEERING STUDY PHASE	1988/01	1990/01	1990/04

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : GLENCOE
PLANT : GLENCOE LAGOON
WORKS NUMBER : 110001845
TREATMENT : CONVENTIONAL LAGOON SEASONAL
: PHOSPHORUS REMOVAL - BATCH
:
DESIGN CAPACITY : 0.94 (1000 M3)

REGION : SOUTHWEST
DISTRICT : MIDDLESEC
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : NEWBIGGEN CREEK
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 2,000

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.76	0.56	0.65	0.89	0.67	0.88	0.53	0.61	0.72	0.67	0.81	0.64	0.70	
LAGOON DISCHARGE	ND	ND	ND	20.25	ND	ND	ND	ND	ND	27.00	ND	ND	23.63	
BOD5														
INFLUENT (MG/L)	133.0	144.0	147.0	119.0	164.0	117.0	138.0	153.0	137.0	134.0	151.0	150.0	140.6	
EFFLUENT (MG/L)	ND	ND	ND	9.9	27.8	ND	ND	ND	ND	14.1	ND	ND	17.3	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	8.81	18.62	ND	ND	ND	ND	9.44	ND	ND	12.11	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	102.0	125.0	114.0	338.0	111.0	126.0	98.0	133.0	106.0	103.0	84.0	62.0	125.2	
EFFLUENT (MG/L)	ND	ND	ND	36.1	58.8	ND	ND	ND	ND	15.8	ND	ND	36.9*	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	32.12	39.39	ND	ND	ND	ND	10.58	ND	ND	25.83	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	8.1	7.9	6.7	6.0	6.4	6.4	6.4	4.8	7.4	7.0	6.4	7.5	6.8	
EFFLUENT (MG/L)	ND	ND	ND	0.6	1.4*	ND	ND	ND	ND	0.9	ND	ND	1.0	1
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	0.53	0.93	ND	ND	ND	ND	0.60	ND	ND	0.70	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	NO
TP	1.0 MG/L	NO

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES	START DATE	END DATE	ANTICIPATED COMPLIANCE
FACILITY EXPANSION/UPGRADING - ENGINEERING STUDY PHASE	1988/02	1990/01	1990/04

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : GODERICH
PLANT : GODERICH WPCP
WORKS NUMBER : 1200030045
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL CONTINUOUS
:
DESIGN CAPACITY : 9.09 (1000 M3)

REGION : SOUTHWEST
DISTRICT : HURON
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : LAKE HURON
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 7,400

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	7.70	6.10	6.80	8.00	7.00	7.20	6.70	7.70	6.60	7.20	8.10	6.70	7.15	
BODS														
INFLUENT (MG/L)	242.0	132.0	177.0	146.0	243.0	143.0	140.0	149.0	102.0	184.0	177.0	145.0	165.0	
EFFLUENT (MG/L)	4.5	5.1	5.2	6.3	4.7	5.8	2.9	2.6	3.5	9.3	5.3	5.2	5.0	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	34.65	31.11	35.36	50.40	32.90	41.76	19.43	20.02	23.10	66.96	42.93	34.84	35.75	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	532.0	369.0	554.0	387.0	328.0	314.0	144.0	369.0	306.0	241.0	260.0	294.0	341.5	
EFFLUENT (MG/L)	5.5	7.4	18.9	19.1	11.4	7.8	7.6	8.9	7.2	14.8	16.5	15.7	11.7	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	42.35	45.14	128.52	152.80	79.80	56.16	50.92	68.53	47.52	106.56	133.65	105.19	83.66	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	7.6	11.9	7.0	6.0	6.1	6.2	4.8	6.3	6.7	6.4	6.1	8.0	7.1	
EFFLUENT (MG/L)	0.5	0.7	1.2*	0.9	0.6	0.4	0.3	0.4	0.4	0.9	0.7	0.6	0.6	1
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	3.85	4.27	8.16	7.20	4.20	2.88	2.01	3.08	2.64	6.48	5.67	4.02	4.29	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	NO

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (E.G. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES

	START DATE	END DATE	ANTICIPATED COMPLIANCE
OPERATIONAL/PROCESS - PHOSPHORUS REMOVAL BEING UPGRADED			
OPERATIONAL/PROCESS - PROCESS CONTROL BEING UPGRADED			

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : GOSFIELD NORTH
PLANT : COTTAM LAGOON
WORKS NUMBER : 110002005
TREATMENT : CONVENTIONAL LAGOON SEASONAL
: PHOSPHORUS REMOVAL - BATCH
:
DESIGN CAPACITY : 0.67 (1000 M3)

REGION : SOUTHWEST
DISTRICT : ESSEX
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : MADDOX DRAIN TO BELLE R.
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 978

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.33	0.30	0.31	0.36	0.31	0.36	0.42	0.30	0.33	0.30	0.32	0.31	0.33	
LAGOON DISCHARGE	ND	ND	ND	64.86	ND	ND	ND	ND	ND	ND	41.19	ND	53.03	
BOD5														
INFLUENT (MG/L)	93.0	89.0	129.0	78.0	110.0	90.0	62.0	146.0	104.0	256.0	ND	150.0	118.8	
EFFLUENT (MG/L)	ND	ND	ND	17.7	ND	ND	ND	ND	ND	ND	15.1	ND	16.4	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	6.37	ND	ND	ND	ND	ND	ND	4.83	ND	5.41	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	84.0	94.0	132.0	76.0	88.0	141.0	68.0	101.0	93.0	82.0	ND	135.0	99.5	
EFFLUENT (MG/L)	ND	ND	ND	40.3	ND	ND	ND	ND	ND	ND	110.3	ND	75.3*	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	14.50	ND	ND	ND	ND	ND	ND	35.29	ND	24.85	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	9.7	7.0	8.7	5.2	5.9	7.5	5.6	4.6	6.9	5.9	ND	8.2	6.8	
EFFLUENT (MG/L)	ND	ND	ND	0.6	ND	ND	ND	ND	ND	ND	0.8	ND	0.7	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	0.21	ND	ND	ND	ND	ND	ND	0.25	ND	0.23	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	NO
TP	1.0 MG/L	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES

	START DATE	END DATE	ANTICIPATED COMPLIANCE
FACILITY EXPANSION/UPGRADING - ENGINEERING STUDY PHASE	1988/02	1990/01	1990/04

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : HANOVER
PLANT : HANOVER WPCP
WORKS NUMBER : 1200201461
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHOROUS REMOVAL-CONTINUOUS
:
DESIGN CAPACITY : 6.36 (1000 M3)

REGION : SOUTHWEST
DISTRICT : GREY
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : SAUGEEN RIVER
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 6,389

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	3.88	3.88	5.08	4.47	4.02	4.13	3.32	3.56	3.36	3.59	4.52	4.00	3.98	
BOD5														
INFLUENT (MG/L)	202.0	254.0	168.0	186.0	165.0	197.0	92.0	262.0	222.0	340.0	329.0	179.0	216.3	
EFFLUENT (MG/L)	ND	7.7	7.7	7.5	7.0	2.0	1.1	1.9	2.6	2.7	4.5	2.9	4.3	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	29.87	39.11	33.52	28.14	8.26	3.65	6.76	8.73	9.69	20.34	11.60	17.11	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	393.0	186.0	173.0	100.0	132.0	217.0	116.0	225.0	157.0	284.0	515.0	92.0	215.8	
EFFLUENT (MG/L)	ND	6.8	10.6	5.6	8.6	4.6	4.1	5.9	5.5	3.3	7.0	10.7	6.6	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	26.38	53.84	25.03	34.57	18.99	13.61	21.00	18.48	11.84	31.64	42.80	26.27	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	14.6	7.8	6.9	4.8	6.4	9.0	5.2	6.7	7.9	7.8	19.2	5.8	8.5	
EFFLUENT (MG/L)	0.3	0.5	0.4	0.3	0.6	0.6	0.4	0.7	0.7	0.4	0.5	0.5	0.5	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	1.16	1.94	2.03	1.34	2.41	2.47	1.32	2.49	2.35	1.43	2.26	2.00	1.99	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NO REMEDIAL MEASURES REPORTED

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (E.G. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA NOT APPLICABLE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : HARROW
PLANT : HARROW LAGOON
WORKS NUMBER : 110002103
TREATMENT : CONVENTIONAL LAGOON SEASONAL
: PHOSPHORUS REMOVAL - BATCH
:
DESIGN CAPACITY : 1.52 (1000 M3)

REGION : SOUTHWEST
DISTRICT : ESSEX
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : CEDAR CREEK
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 2,415

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.31	1.19	1.23	1.37	1.42	1.72	2.42	1.25	1.32	1.17	1.35	1.40	1.43	
LAGOON DISCHARGE	ND	ND	ND	ND	174.92	ND	104.40	89.85	ND	ND	154.79	ND	130.99	
BOD5														
INFLUENT (MG/L)	89.0	132.0	152.0	87.0	212.0	108.0	112.0	92.0	121.0	56.0	162.0	144.0	122.3	
EFFLUENT (MG/L)	ND	ND	ND	ND	12.1	ND	2.6	10.6	ND	ND	11.5	ND	9.2	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	17.18	ND	6.29	13.25	ND	ND	15.52	ND	13.16	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	87.0	208.0	206.0	87.0	552.0	126.0	120.0	96.0	144.0	63.0	70.0	409.0	180.7	
EFFLUENT (MG/L)	ND	ND	ND	ND	15.4	ND	11.1	23.2	ND	ND	29.4	ND	19.8	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	21.86	ND	26.86	29.00	ND	ND	39.69	ND	28.31	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	5.4	7.3	7.8	4.5	8.8	4.8	6.4	4.4	6.9	3.7	6.3	6.2	6.0	
EFFLUENT (MG/L)	ND	ND	ND	ND	0.3	ND	0.5	0.8	ND	ND	0.6	ND	0.6	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	ND	0.42	ND	1.21	1.00	ND	ND	0.81	ND	0.86	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES	START DATE	END DATE	ANTICIPATED COMPLIANCE
FACILITY EXPANSION/UPGRADING - ENGINEERING STUDY PHASE	1988/01	1990/01	

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : HENSALL
PLANT : HENSALL LAGOON
WORKS NUMBER : 110000926
TREATMENT : CONVENTIONAL LAGOON ANNUAL

DESIGN CAPACITY : 0.59 (1000 M3)

REGION : SOUTHWEST
DISTRICT : HURON
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : BLACK CK TO AUSABLE R.
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 1,195

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.57	0.53	0.63	0.63	0.58	0.61	0.57	0.65	0.58	0.60	0.61	0.57	0.59	
LAGOON DISCHARGE	ND	ND	ND	119.95	61.17	ND	ND	ND	ND	40.96	ND	ND	74.03	
BOD5														
INFLUENT (MG/L)	120.0	252.0	96.0	125.0	ND	70.0	71.0	116.0	153.0	140.0	142.0	241.0	138.7	
EFFLUENT (MG/L)	ND	ND	ND	8.2	2.0	ND	ND	ND	ND	2.3	ND	ND	4.2	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	5.16	1.16	ND	ND	ND	ND	1.38	ND	ND	2.48	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	170.0	536.0	197.0	197.0	ND	122.0	98.0	111.0	278.0	176.0	183.0	198.0	206.0	
EFFLUENT (MG/L)	ND	ND	ND	18.3	4.3	ND	ND	ND	ND	3.9	ND	ND	8.8	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	11.52	2.49	ND	ND	ND	ND	2.34	ND	ND	5.19	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.6	9.8	5.7	6.7	ND	5.8	6.2	6.1	8.6	6.8	6.8	7.7	7.0	
EFFLUENT (MG/L)	ND	ND	ND	1.4	0.1	ND	ND	ND	ND	0.8	ND	ND	0.8	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	0.88	0.05	ND	ND	ND	ND	0.48	ND	ND	0.47	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	NA	NA

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES

	START DATE	END DATE	ANTICIPATED COMPLIANCE
FACILITY EXPANSION/UPGRADING - ENGINEERING STUDY PHASE	1988/02	1990/01	

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : INGERSOLL
PLANT : INGERSOLL NEW WPCP
WORKS NUMBER : 110003969
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL-CONTINUOUS
:
DESIGN CAPACITY : 6.81 (1000 M3)

REGION : SOUTHWEST
DISTRICT : OXFORD
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : THAMES RIVER
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 5,500

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	3.99	4.16	4.55	5.54	4.76	4.82	4.50	4.74	4.37	5.30	5.66	4.92	4.78	
BOD5														
INFLUENT (MG/L)	69.0	128.0	146.0	145.0	150.0	124.0	144.0	194.0	157.0	215.0	139.0	147.0	146.5	
EFFLUENT (MG/L)	5.6	12.4	9.0	34.1	9.9	7.5	4.1	4.6	2.7	9.8	19.3	17.8	11.4	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	22.34	51.58	40.95	188.91	47.12	36.15	18.45	21.80	11.79	51.94	109.23	87.57	54.49	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	134.0	139.0	290.0	133.0	128.0	93.0	169.0	210.0	168.0	235.0	161.0	135.0	166.3	
EFFLUENT (MG/L)	8.0	24.2	9.2	30.9	9.9	7.8	6.6	5.4	3.6	9.7	11.7	8.7	11.3	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	31.92	100.67	41.86	171.18	47.12	37.59	29.70	25.59	15.73	51.41	66.22	42.80	54.01	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	4.7	6.6	11.9	8.4	5.2	6.2	4.7	6.3	6.0	7.9	6.9	6.9	6.8	
EFFLUENT (MG/L)	0.3	1.2*	0.5	2.5*	1.1*	0.8	1.4*	2.7*	1.3*	1.9*	0.8	1.7*	1.4	8
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	1.19	4.99	2.27	13.85	5.23	3.85	6.30	12.79	5.68	10.07	4.52	8.36	6.69	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	NO

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES	START DATE	END DATE	ANTICIPATED COMPLIANCE
INFLUENT SEWAGE - ENFORCING SEWER USE BYLAW	1988/04		1990/01
SLUDGE DISPOSAL/REMOVAL - UPGRADING SLUDGE THICKENING FACILITIES	1988	1990/12	1990/01

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : INGERSOLL
PLANT : INGERSOLL OLD WPCP
WORKS NUMBER : 1110[illegible]4978
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: [illegible] REMOVAL CONTINUOUS
:
DESIGN CAPACITY : 3.41 (1000 M3)

REGION : SOUTHWEST
DISTRICT : OXFORD
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : THAMES RIVER
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 2,800

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.33	1.23	1.35	1.15	1.17	1.79	1.67	1.78	1.65	1.03	1.08	1.82	1.42	
BOD5														
INFLUENT (MG/L)	69.0	128.0	146.0	145.0	150.0	124.0	144.0	194.0	157.0	215.0	139.0	147.0	146.5	
EFFLUENT (MG/L)	8.2	15.9	10.5	7.8	32.9	6.9	3.0	4.4	4.7	3.7	3.2	11.6	9.4	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	10.90	19.55	14.17	8.97	38.49	12.35	5.01	7.83	7.75	3.81	3.45	21.11	13.36	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	134.0	139.0	290.0	133.0	128.0	93.0	169.0	210.0	168.0	235.0	161.0	135.0	166.3	
EFFLUENT (MG/L)	14.9	14.6	17.5	12.6	33.5	9.1	16.0	7.4	10.3	9.7	5.6	10.3	13.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	19.81	17.95	23.62	14.49	39.19	16.28	26.72	13.17	16.99	9.99	6.04	18.74	19.17	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	4.7	6.6	11.9	8.4	5.2	6.2	4.7	6.3	6.0	7.9	6.9	6.9	6.8	
EFFLUENT (MG/L)	0.5	1.2*	1.0	2.0*	2.4*	1.1*	1.4*	2.3*	1.4*	2.6*	1.2*	1.1*	1.5	10
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	0.66	1.47	1.35	2.30	2.80	1.96	2.33	4.09	2.31	2.67	1.29	2.00	2.13	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	NO

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES

	START DATE	END DATE	ANTICIPATED COMPLIANCE
INFLUENT SEWAGE - ENFORCING SEWER USE BYLAW	1988/04		1990/01
SLUDGE DISPOSAL/REMOVAL - UPGRADING SLUDGE THICKENING FACILITIES	1988	1990/12	1990/01

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : KINCARDINE
PLANT : KINCARDINE LAGOON
WORKS NUMBER : 110000864
TREATMENT : AERATED CELL PLUS LAGOON
: CONTINUOUS DISCHARGE
: PHOSPHORUS REMOVAL-CONTINUOUS
DESIGN CAPACITY : 5.91 (1000 M3)

REGION : SOUTHWEST
DISTRICT : BRUCE
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : LAKE HURON
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 7,000

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	2.48	2.12	2.64	2.73	2.38	2.32	2.04	2.08	1.89	1.89	2.34	2.10	2.25	
LAGOON DISCHARGE	77.00	59.48	81.83	81.88	73.73	69.55	63.32	64.34	42.59	54.77	70.32	65.01	66.99	
BOD5														
INFLUENT (MG/L)	94.0	79.0	57.0	59.0	83.0	89.0	120.0	122.0	182.0	114.0	85.0	118.0	100.2	
EFFLUENT (MG/L)	5.9	6.4	12.1	16.4	10.5	3.0	4.0	8.6	4.9	1.3	1.6	4.2	6.6	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	14.63	13.56	31.94	44.77	24.99	6.96	8.16	17.88	9.26	2.45	3.74	8.82	14.85	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	121.0	103.0	42.0	45.0	70.0	66.0	134.0	123.0	144.0	132.0	96.0	79.0	96.3	
EFFLUENT (MG/L)	3.3	4.1	8.6	15.5	11.0	2.7	4.6	9.1	9.0	2.8	3.7	4.9	6.6	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	8.18	8.69	22.70	42.31	26.18	6.26	9.38	18.92	17.01	5.29	8.65	10.29	14.85	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.7	5.6	3.9	4.0	5.1	4.6	6.7	6.4	11.7	7.7	5.6	7.9	6.3	
EFFLUENT (MG/L)	1.1*	1.1*	0.8	0.6	1.2*	3.0*	2.3*	3.1*	3.5*	1.0	0.8	0.7	1.6	7
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	2.72	2.33	2.11	1.63	2.85	6.96	4.69	6.44	6.61	1.89	1.87	1.47	3.60	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	1.0 MG/L	NO

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES

	START DATE	END DATE	ANTICIPATED COMPLIANCE
FACILITY EXPANSION/UPGRADING - REMEDIAL MEASURES BEING EVALUATED	1989/01	1990/12	1990/01

[illegible] RATE [illegible] APPROVAL ASSESSMENT

MUNICIPALITY	: [illegible]		REGION	:	SOUTHWEST
PLANT	: [illegible] LAGOON		DISTRICT	:	[illegible]
WORKS NUMBER	: [illegible]		OPERATING AUTHORITY	:	MUNICIPAL
TREATMENT	: CONVENTIONAL LAGOON [illegible]		WATERCOURSE	:	[illegible] CREEK
	[illegible]		MINOR BASIN	:	ERIE
DESIGN CAPACITY	: [illegible]		MAJOR BASIN	:	GREAT LAKES
			POPULATION SERVED	:	5,[illegible]

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW [illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	4.48	4.07	4.06	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BOD														
INFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0		
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
LOADING LIMIT (KG/D)														
SUSPENDED SOLIDS														
INFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0		
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
LOADING LIMIT (KG/D)														
TOTAL PHOSPHORUS														
INFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
LOADING LIMIT (KG/D)														

SUMMARY

PARM	CRITERIA	LOADING	COMPLIES WITH CONC LOADING
BOD	[illegible] MG/L	NA	INSUFFICIENT DATA
SS	[illegible] MG/L	NA	INSUFFICIENT DATA
TP	1.0 MG/L	NA	INSUFFICIENT DATA

NOTE:
BOD - ASSESSED MONTHLY
SS - ASSESSED MONTHLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : KINGSVILLE
PLANT : KINGSVILLE LAGOON
WORKS NUMBER : 120001078
TREATMENT : CONVENTIONAL LAGOON SEASONAL
: PHOSPHORUS REMOVAL - BATCH
:
DESIGN CAPACITY : 2.75 (1000 M3)

REGION : SOUTHWEST
DISTRICT : ESSEX
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : WIGLE CREEK
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 5,200

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	4.09	2.91	3.13	3.75	3.72	5.35	4.48	4.07	4.06	3.27	3.56	2.51	3.74	
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BOD5														
INFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
SUSPENDED SOLIDS														
INFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	INSUFFICIENT DATA
SS	25.0 MG/L	INSUFFICIENT DATA
TP	1.0 MG/L	INSUFFICIENT DATA

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : LEAMINGTON
WWT : LEAMINGTON WWT
WWTL NUMBER : [illegible]
TREATMENT : EXTENDED AERATION
: CHLORINE SEMI-AVG CONTINUOUS

DESIGN CAPACITY : 10.00 (1000 M3)

REGION : SOUTHWEST
DISTRICT : [illegible]
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : LAKE ERIE
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 15,600

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	17.37	21.46	15.15	29.64	21.26	25.22	18.99	27.83	37.19	19.46	16.74	14.64	21.27	
BOD5														
INFLUENT (MG/L)	180.0	237.0	205.0	172.0	293.0	75.0	172.0	158.0	354.0	540.0	224.0	247.0	226.2	
EFFLUENT (MG/L)	3.5	4.6	4.1	3.5	5.0	9.0	2.3	4.4	8.2	5.1	3.7	3.5	4.4	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	62.07	22.67	62.11	72.20	146.50	226.96	43.66	122.40	304.95	98.73	61.93	47.74	94.59	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	144.0	243.0	155.0	188.0	263.0	80.0	158.0	179.0	681.0	1,068.0	186.0	287.0	313.6	
EFFLUENT (MG/L)	13.4	5.2	10.5	8.8	13.9	17.0	9.2	10.2	18.3	17.2	10.0	11.8	12.1	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	237.44	111.59	159.07	181.54	295.51	428.74	174.70	284.86	680.57	334.92	167.40	160.95	257.57	
TOTAL PHOSPHORUS														
INFLUENT (MG/L)	1.5	1.7	3.3	6.5	4.0	4.0	3.7	3.8	4.8	6.3	3.7	3.7	3.9	
EFFLUENT (MG/L)	0.2	0.3	0.6	1.1*	1.0	1.0	0.5	0.7	0.8	0.7	0.4	0.5	0.7	1
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	3.54	6.43	9.09	22.69	21.26	25.22	9.49	19.48	29.75	13.55	6.69	6.82	14.89	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	NO

NOTE :
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : LISTOWEL
PLANT : LISTOWEL LAGOON CONT DIS (SUMMER SPRAY)
WORKS NUMBER : 110000409
TREATMENT : AERATED CELL PLUS LAGOON
: LAGOON AND SPRAY
: PHOSPHORUS REMOVAL-CONTINUOUS
DESIGN CAPACITY : 4.91 (1000 M3)

REGION : SOUTHWEST
DISTRICT : PERTH
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : CHAPMAN DRAIN
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 4,554

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	3.37	3.90	6.49	6.76	5.12	5.16	3.36	3.35	3.57	3.79	5.69	4.05	4.55	
LAGOON DISCHARGE	20.91	ND	286.31	443.24	ND	ND	ND	ND	ND	ND	337.68	340.03	285.63	
BOD5														
INFLUENT (MG/L)	324.0	345.0	256.0	342.0	205.0	643.0	258.0	275.0	287.0	351.0	184.0	205.0	306.3	
EFFLUENT (MG/L)	33.3	ND	34.1	26.1	ND	ND	ND	ND	ND	ND	14.9	26.6	27.0	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	112.22	ND	221.30	176.43	ND	ND	ND	ND	ND	ND	84.78	107.73	122.85	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	243.0	306.0	169.0	293.0	120.0	635.0	147.0	324.0	444.0	284.0	220.0	176.0	280.1	
EFFLUENT (MG/L)	41.9	ND	44.2	32.1	ND	ND	ND	ND	ND	ND	17.1	28.0	32.7	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	141.20	ND	286.85	216.99	ND	ND	ND	ND	ND	ND	97.29	113.40	148.79	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	3.7	4.0	2.8	4.3	4.0	4.7	5.4	4.6	4.6	4.9	3.5	4.0	4.2	
EFFLUENT (MG/L)	1.2*	ND	1.4*	1.1*	ND	ND	ND	ND	ND	ND	0.6	0.9	1.0	3
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	4.04	ND	9.08	7.43	ND	ND	ND	ND	ND	ND	3.41	3.64	4.55	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	1.0 MG/L	NO

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES

	START DATE	END DATE	ANTICIPATED COMPLIANCE
FACILITY EXPANSION/UPGRADING - ENGINEERING STUDY PHASE	1989	1992/12	

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : LONDON
PLANT : [illegible]
WORKS NUMBER : 1[illegible]
TREATMENT : EXTENDED AERATION
: PHOSPHORUS REMOVAL CONTINUOUS
DESIGN CAPACITY : [illegible] LITRES/DAY

REGION : SOUTHWEST
DISTRICT : MIDDLESEX
OWNERSHIP AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : THAMES RIVER
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : [illegible]

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.10	0.10	0.09	0.13	0.11	0.11	0.12	0.12	0.11	0.12	0.13	0.12	0.11	
BOD:														
INFLUENT (MG/L)	59.0	77.0	124.0	36.0	89.0	93.0	55.0	74.0	112.0	125.0	87.0	160.0	96.9	
EFFLUENT (MG/L)	3.1	0.8	6.1	7.2	7.6	15.4	6.7	8.0	9.3	6.6	8.1	10.6	7.3	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	0.31	0.08	1.14	0.93	0.83	1.47	0.80	0.96	1.02	0.79	1.05	1.27	0.80	
SUSPENDED SOLIDS:														
INFLUENT (MG/L)	198.0	144.0	301.0	85.0	186.0	210.0	116.0	176.0	258.0	229.0	167.0	149.0	182.4	
EFFLUENT (MG/L)	1.9	1.6	3.9	3.7	17.0	6.7	4.2	3.4	3.4	5.0	2.9	5.8	5.0	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	0.19	0.16	0.35	0.48	1.87	0.73	0.50	0.40	0.37	0.60	0.37	0.69	0.55	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	4.3	11.6	8.8	1.9	5.2	4.5	5.2	4.0	6.5	6.1	4.9	5.8	5.7	
EFFLUENT (MG/L)	0.2	0.1	0.2	0.2	0.7	0.5	0.4	0.5	0.7	0.5	0.5	0.3	0.4	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	0.02	0.01	0.01	0.02	0.07	0.05	0.04	0.06	0.07	0.06	0.06	0.03	0.04	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES	START DATE	END DATE	ANTICIPATED COMPLIANCE
FACILITY EXPANSION/UPGRADING - ENVIRONMENTAL ASSESSMENT BEING CONDUCTED	1990/01	1992/12	

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : LONDON
PLANT : ADELAIDE WPCP
WORKS NUMBER : 120000872
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL-CONTINUOUS
:
DESIGN CAPACITY : 18.18 (1000 M3)

REGION : SOUTHWEST
DISTRICT : MIDDLESEC
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : THAMES RIVER
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 35,678

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	21.91	20.34	21.11	23.82	22.49	25.62	22.01	22.32	22.66	19.16	21.16	22.32	22.08	
BOD5														
INFLUENT (MG/L)	233.0	170.0	144.0	151.0	132.0	131.0	197.0	106.0	159.0	197.0	104.0	180.0	158.7	
EFFLUENT (MG/L)	2.0	2.0	4.0	2.0	3.0	3.0	2.0	2.0	4.0	2.0	2.0	3.0	2.6	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	43.82	40.68	84.44	47.64	67.47	76.86	44.02	44.64	90.64	38.32	42.32	66.96	57.41	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	186.0	149.0	151.0	121.0	129.0	145.0	168.0	130.0	209.0	188.0	120.0	163.0	154.9	
EFFLUENT (MG/L)	7.0	5.0	5.0	5.0	5.0	5.0	6.0	6.0	7.0	7.0	5.0	7.0	5.8	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	153.37	101.70	105.55	119.10	112.45	128.10	132.06	133.92	158.62	134.12	105.80	156.24	128.06	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.5	5.3	4.8	6.0	5.8	5.0	6.7	5.8	6.0	7.8	5.6	5.8	5.9	
EFFLUENT (MG/L)	0.7	0.4	0.5	0.6	0.3	0.5	0.7	0.5	0.5	0.5	0.5	0.6	0.5	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	15.33	8.13	10.55	14.29	6.74	12.81	15.40	11.16	11.33	9.58	10.58	13.39	11.04	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : LONDON
PLANT : [illegible]
MOE'S NUMBER : [illegible]
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL (CONTINUOUS)
:
DESIGN CAPACITY : 124.55 (MGD MG)

REGION : SOUTHWEST
DISTRICT : MIDDLESEX
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : THAMES RIVER
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 166274

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	114.65	101.35	114.24	130.51	118.73	129.57	119.68	125.46	124.60	143.66	125.52	103.11	120.97	
BOD5														
INFLUENT (MG/L)	506.0	243.0	213.0	255.0	270.0	252.0	334.0	373.0	408.0	387.0	152.0	398.0	299.5	
EFFLUENT (MG/L)	3.0	4.0	6.0	5.0	5.0	6.0	3.0	3.0	4.0	4.0	5.0	1.0	4.1	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	343.95	407.76	685.44	652.95	593.65	777.42	359.04	376.38	498.40	574.64	627.60	103.11	495.98	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	185.0	169.0	166.0	191.0	235.0	241.0	253.0	201.0	294.0	263.0	160.0	163.0	210.1	
EFFLUENT (MG/L)	11.0	10.0	16.0	12.0	11.0	12.0	7.0	7.0	8.0	10.0	12.0	16.0	11.0	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	1261.15	1019.40	1827.84	1566.12	1306.03	1554.84	837.76	878.22	996.80	1436.60	1506.24	1649.76	1330.67	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	7.0	6.9	5.3	7.0	8.5	7.1	8.7	8.4	8.8	10.1	6.5	6.0	7.5	
EFFLUENT (MG/L)	0.8	0.8	0.6	0.8	0.8	0.5	1.0	0.6	0.4	1.0	0.9	0.8	0.8	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	91.72	81.55	68.54	104.40	94.98	64.78	119.68	75.27	49.84	143.66	112.96	82.48	96.78	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NO REMEDIAL MEASURES REPORTED

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : LONDON
PLANT : OXFORD WPCP
WORKS NUMBER : 120000854
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL-CONTINUOUS
:
DESIGN CAPACITY : 5.45 (1000 M3)

REGION : SOUTHWEST
DISTRICT : MIDDLESEC
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : THAMES RIVER
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 16,224

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	5.15	4.79	4.99	4.71	5.39	5.33	4.82	4.98	4.73	4.48	4.75	6.02	5.01	
BOD5														
INFLUENT (MG/L)	166.0	123.0	146.0	117.0	147.0	83.0	137.0	118.0	157.0	208.0	129.0	145.0	139.7	
EFFLUENT (MG/L)	2.0	7.0	6.0	3.0	5.0	3.0	3.0	5.0	4.0	3.0	3.0	4.0	4.0	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	10.30	33.53	29.94	14.13	26.95	15.99	14.46	24.90	18.92	13.44	14.25	24.08	20.04	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	166.0	147.0	141.0	110.0	163.0	115.0	155.0	144.0	164.0	169.0	105.0	132.0	142.6	
EFFLUENT (MG/L)	7.0	12.0	7.0	5.0	6.0	7.0	6.0	14.0	9.0	8.0	8.0	5.0	7.8	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	36.05	57.48	34.93	23.55	32.34	37.31	28.92	69.72	42.57	35.84	38.00	30.10	39.08	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	7.2	6.5	6.3	5.2	7.6	4.9	6.9	6.6	7.1	8.8	6.6	6.4	6.7	
EFFLUENT (MG/L)	0.7	0.5	0.3	0.9	0.5	0.6	ND	0.9	0.5	0.6	1.0	0.8	0.7	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	3.60	2.39	1.49	4.23	2.69	3.19	ND	4.48	2.36	2.68	4.75	4.81	3.51	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY	: LONDON	REGION	: SOUTHWEST
PLANT	: PETTERSBURG WPCP	DISTRICT	: MIDDLESEX
WORKS NUMBER	: 1200100336	OPERATING AUTHORITY	: MUNICIPAL
TREATMENT	: CONVENTIONAL ACTIVATED SLUDGE	WATERCOURSE	: THAMES RIVER
	: PHOSPHORUS REMOVAL CONTINUOUS	MINOR BASIN	: ERIE
	:	MAJOR BASIN	: GREAT LAKES
DESIGN CAPACITY	: 22.04 (1000 M3)	POPULATION SERVED	: 25,655

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	20.40	18.23	19.65	21.92	18.68	18.16	15.27	15.71	16.21	15.96	19.07	16.35	17.97	
BOD5														
INFLUENT (MG/L)	197.0	152.0	135.0	164.0	191.0	154.0	210.0	214.0	187.0	239.0	155.0	205.0	183.6	
EFFLUENT (MG/L)	3.0	5.0	4.0	3.0	5.0	4.0	3.0	5.0	4.0	3.0	3.0	5.0	3.9	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	61.20	91.15	78.60	65.76	93.40	72.64	45.81	78.55	64.84	47.88	57.21	81.75	70.08	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	117.0	123.0	126.0	143.0	152.0	131.0	155.0	185.0	174.0	164.0	123.0	152.0	145.4	
EFFLUENT (MG/L)	5.0	10.0	8.0	5.0	7.0	5.0	4.0	7.0	5.0	5.0	6.0	8.0	6.3	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	102.00	182.30	157.20	109.60	130.76	90.80	61.08	109.97	81.05	79.80	114.42	130.80	113.21	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	5.4	5.3	4.7	7.1	6.6	4.9	6.2	7.2	6.3	8.2	5.9	6.4	6.2	
EFFLUENT (MG/L)	0.6	0.7	0.6	0.7	0.8	0.9	0.9	0.6	0.5	0.8	0.8	0.6	0.7	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	12.24	12.76	11.79	15.34	14.94	16.34	13.74	9.42	8.10	12.76	15.25	9.81	12.58	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NO REMEDIAL MEASURES REPORTED

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : LONDON
PLANT : VAUXHALL WPCP
WORKS NUMBER : 120000845
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL-CONTINUOUS
:
DESIGN CAPACITY : 20.91 (1000 M3)

REGION : SOUTHWEST
DISTRICT : MIDDLESEC
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : THAMES RIVER
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 22,981

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	19.03	18.14	18.10	18.61	16.79	17.67	16.25	17.47	17.29	17.00	17.10	14.15	17.30	
BOD5														
INFLUENT (MG/L)	364.0	278.0	348.0	305.0	245.0	276.0	387.0	326.0	295.0	370.0	221.0	328.0	311.9	
EFFLUENT (MG/L)	2.0	4.0	4.0	4.0	4.0	4.0	4.0	3.0	4.0	2.0	4.0	3.0	3.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	38.06	72.56	72.40	74.44	67.16	70.68	65.00	52.41	69.16	34.00	68.40	42.45	60.55	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	171.0	165.0	194.0	166.0	170.0	229.0	171.0	219.0	239.0	257.0	192.0	209.0	198.5	
EFFLUENT (MG/L)	8.0	8.0	9.0	9.0	7.0	7.0	7.0	6.0	6.0	5.0	9.0	5.0	7.2	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	152.24	145.12	162.90	167.49	117.53	123.69	113.75	104.82	103.74	85.00	153.90	70.75	124.56	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.1	5.2	4.2	5.7	5.4	4.4	4.8	7.5	6.5	7.7	5.1	5.6	5.7	
EFFLUENT (MG/L)	0.3	0.4	0.3	0.6	0.8	0.6	0.7	1.0	0.8	0.7	0.7	0.6	0.6	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	5.70	7.25	5.43	11.16	13.43	10.60	11.37	17.47	13.83	11.90	11.97	8.49	10.38	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : LUCAN
PLANT : LUCAN LAGOON
WORKS NUMBER : 110000855
TREATMENT : CONVENTIONAL LAGOON SEASONAL
:
:
DESIGN CAPACITY : 0.29 (1000 M3)

REGION : SOUTHWEST
DISTRICT : MIDDLESEX
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : LITTLE AUSABLE RIVER
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 1,650

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.86	0.69	0.92	1.26	0.73	0.79	0.47	0.55	0.76	ND	0.96	0.63	0.78	
LAGOON DISCHARGE	26.79	19.35	28.57	4.05	29.59	ND	ND	4.79	22.91	ND	ND	ND	19.44	
BOD5														
INFLUENT (MG/L)	129.0	142.0	138.0	71.0	ND	71.0	38.0	37.0	69.0	ND	73.0	108.0	87.6	
EFFLUENT (MG/L)	ND	28.8	26.7	19.6	18.9	ND	ND	ND	18.3	ND	ND	ND	22.5	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	19.87	24.56	24.69	13.79	ND	ND	ND	13.90	ND	ND	ND	17.55	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	91.0	160.0	152.0	70.0	ND	59.0	36.0	19.0	69.0	ND	79.0	87.0	82.2	
EFFLUENT (MG/L)	ND	33.6	32.5	20.1	20.4	ND	ND	ND	22.5	ND	ND	ND	25.8	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	23.18	29.90	25.32	14.89	ND	ND	ND	17.10	ND	ND	ND	20.12	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	7.1	6.9	8.3	6.3	ND	3.3	3.2	2.8	4.5	ND	4.0	6.0	5.2	
EFFLUENT (MG/L)	ND	2.3	2.4	1.9	0.4	ND	ND	ND	1.4	ND	ND	ND	1.7	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	1.58	2.20	2.39	0.29	ND	ND	ND	1.06	ND	ND	ND	1.33	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	NA	NA

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES	START DATE	END DATE	ANTICIPATED COMPLIANCE
FACILITY EXPANSION/UPGRADING - FINAL DESIGN PHASE	1988	1991/12	1992/01

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : MAIDSTONE
PLANT : BELLE RIVER-MAIDSTONE WPCP
WORKS NUMBER : 110002078
TREATMENT : EXTENDED AERATION
: PHOSPHORUS REMOVAL-CONTINUOUS
:
DESIGN CAPACITY : 6.81 (1000 M3)

REGION : SOUTHWEST
DISTRICT : ESSEX
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : LAKE ST.CLAIR
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 8,568

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	5.09	4.52	4.79	5.82	4.93	6.62	5.86	4.90	4.78	4.57	4.78	4.16	5.07	
BOD5														
INFLUENT (MG/L)	113.0	101.0	118.0	108.0	121.0	93.0	86.0	93.0	93.0	81.0	84.0	117.0	100.7	
EFFLUENT (MG/L)	2.0	1.1	4.4	3.5	3.2	2.0	1.7	1.5	1.4	2.5	1.3	4.5	2.4	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	10.18	4.97	21.07	20.37	15.77	13.24	9.96	7.35	6.69	11.42	6.21	18.72	12.17	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	108.0	133.0	120.0	114.0	133.0	99.0	89.0	111.0	129.0	130.0	105.0	134.0	117.1	
EFFLUENT (MG/L)	10.7	10.8	13.8	13.9	10.0	10.5	9.1	7.0	5.4	6.1	10.9	9.9	9.8	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	54.46	48.81	66.10	80.89	49.30	69.51	53.32	34.30	25.81	27.87	52.10	41.18	49.69	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	3.0	3.4	3.8	2.9	3.6	3.8	3.6	3.1	4.8	4.0	3.3	4.8	3.7	
EFFLUENT (MG/L)	0.3	0.2	0.3	0.2	0.5	0.5	0.3	0.4	0.4	0.4	0.5	0.4	0.4	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	1.52	0.90	1.43	1.16	2.46	3.31	1.75	1.96	1.91	1.82	2.39	1.66	2.03	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES

	START DATE	END DATE	ANTICIPATED COMPLIANCE
FACILITY EXPANSION/UPGRADING - ENGINEERING STUDY PHASE	1988	1991/12	

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : MARKDALE
PLANT : MARKDALE LAGOON
WORKS NUMBER : 110000418
TREATMENT : AERATED LAGOON
: PHOSPHORUS REMOVAL CONTINUOUS
: EXFILTRATION LAGOON
DESIGN CAPACITY : 1.12 (1000 M3)

REGION : SOUTHWEST
DISTRICT : GREY
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : NO DISC.TO SURFACE WATER
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 1,235

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.39	0.39	0.60	0.54	0.44	0.46	0.36	0.36	0.32	0.35	0.43	0.35	0.42	
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BOD5														
INFLUENT (MG/L)	132.0	131.0	189.0	89.0	158.0	253.0	199.0	267.0	118.0	186.0	165.0	147.0	169.5	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
SUSPENDED SOLIDS														
INFLUENT (MG/L)	105.0	120.0	166.0	64.0	94.0	155.0	144.0	180.0	91.0	127.0	98.0	70.0	117.8	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	9.3	7.8	7.0	5.4	12.1	5.5	16.4	12.4	10.1	8.7	6.9	10.3	9.3	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	NA	NO DIRECT DISCHARGE
SS	NA	NO DIRECT DISCHARGE
TP	NA	NO DIRECT DISCHARGE

NOTE:
BOD - HAS NO CRITERIA
SS - HAS NO CRITERIA
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES	START DATE	END DATE	ANTICIPATED COMPLIANCE
FACILITY EXPANSION/UPGRADING - REMEDIAL MEASURES BEING EVALUATED	1988	1990/12	

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : MC GILLIVRAY
PLANT : PARKHILL LAGOON
WORKS NUMBER : 110002461
TREATMENT : CONVENTIONAL LAGOON SEASONAL
: PHOSPHORUS REMOVAL - BATCH
:
DESIGN CAPACITY : 1.10 (1000 M3)

REGION : SOUTHWEST
DISTRICT : MIDDLESEX
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : PARKHILL CREEK
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 1,544

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.64	0.59	0.64	0.64	0.58	0.83	0.91	0.71	1.53	0.61	0.77	0.62	0.76	
LAGOON DISCHARGE	ND	ND	ND	ND	130.77	ND	ND	ND	ND	90.81	ND	ND	110.79	
BOD5														
INFLUENT (MG/L)	114.0	126.0	ND	97.0	150.0	133.0	166.0	55.0	117.0	121.0	99.0	121.0	118.1	
EFFLUENT (MG/L)	ND	ND	ND	ND	4.0	ND	ND	ND	ND	1.6	ND	ND	2.8	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	2.32	ND	ND	ND	ND	0.97	ND	ND	2.13	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	143.0	148.0	ND	78.0	116.0	89.0	180.0	375.0	136.0	81.0	103.0	85.0	139.5	
EFFLUENT (MG/L)	ND	ND	ND	ND	9.8	ND	ND	ND	ND	10.9	ND	ND	10.4	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	5.68	ND	ND	ND	ND	6.64	ND	ND	7.90	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	7.2	7.5	ND	8.3	5.4	5.8	8.6	9.0	8.3	5.4	6.3	6.3	7.1	
EFFLUENT (MG/L)	ND	ND	ND	ND	0.3	ND	ND	ND	ND	0.1	ND	ND	0.2	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	ND	0.17	ND	ND	ND	ND	0.06	ND	ND	0.15	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES	START DATE	END DATE	ANTICIPATED COMPLIANCE
FACILITY EXPANSION/UPGRADING - ENGINEERING STUDY PHASE	1988/02	1990/01	

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : MEAFORD
PLANT : MEAFORD WPCP
WORKS NUMBER : 110000445
TREATMENT : HIGH RATE

DESIGN CAPACITY : 3.91 (1000 M3)

REGION : SOUTHWEST
DISTRICT : GREY
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : GEORGIAN BAY
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 4,318

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	3.88	2.93	4.11	3.25	2.61	3.02	2.31	2.28	2.21	2.35	2.86	2.85	2.89	
BOD5														
INFLUENT (MG/L)	54.0	75.0	45.0	54.0	58.0	55.0	90.0	61.0	92.0	79.0	55.0	94.0	67.7	
EFFLUENT (MG/L)	10.6	4.8	7.7	7.8	11.1	16.3	21.0	4.3	7.2	16.0	7.3	10.5	10.4	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	41.12	14.06	31.64	25.35	28.97	49.22	48.51	9.80	15.91	37.60	20.87	29.92	30.06	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	72.0	85.0	105.0	41.0	129.0	96.0	132.0	86.0	136.0	82.0	46.0	63.0	89.4	
EFFLUENT (MG/L)	20.9	7.3	13.0	7.1	6.6	7.0	7.3	4.6	6.3	8.5	7.3	6.9	8.6	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	81.09	21.38	53.43	23.07	17.22	21.14	16.86	10.48	13.92	19.97	20.87	19.66	24.85	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	3.9	4.6	2.8	3.1	3.5	4.0	3.0	10.5	6.7	4.9	3.6	5.0	4.6	—
EFFLUENT (MG/L)	2.1	2.4	1.6	1.9	2.3	2.5	2.2	3.8	4.3	4.1	2.1	2.5	2.7	—
CONCENTRATION LIMIT (MG/L)														—
LOADING (KG/D)	8.14	7.03	6.57	6.17	6.00	7.55	5.08	8.66	9.50	9.63	6.00	7.12	7.80	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	NA	NA

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES	START DATE	END DATE	ANTICIPATED COMPLIANCE
FACILITY EXPANSION/UPGRADING - ENVIRONMENTAL ASSESSMENT BEING CONDUCTED	1988	1992/12	
FACILITY EXPANSION/UPGRADING - CONSTRUCTION INITIATED	1987	1990/12	

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : MILDMAY
PLANT : MILDMAY WPCP
WORKS NUMBER : 110002194
TREATMENT : EXTENDED AERATION
: PHOSPHORUS REMOVAL-CONTINUOUS
:
DESIGN CAPACITY : 0.96 (1000 M3)

REGION : SOUTHWEST
DISTRICT : BRUCE
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : OTTER CREEK
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 973

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.80	0.70	0.83	0.79	0.73	0.75	0.71	0.64	0.58	0.58	0.67	0.60	0.70	
BOD5														
INFLUENT (MG/L)	128.0	79.0	97.0	81.0	95.0	64.0	97.0	83.0	89.0	84.0	90.0	77.0	88.7	
EFFLUENT (MG/L)	4.5	4.7	3.8	2.6	3.6	1.2	1.3	0.8	1.6	2.5	4.4	2.9	2.8	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	3.60	3.29	3.15	2.05	2.62	0.90	0.92	0.51	0.92	1.45	2.94	1.74	1.96	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	299.0	149.0	156.0	103.0	127.0	139.0	137.0	209.0	155.0	98.0	120.0	103.0	149.6	
EFFLUENT (MG/L)	5.6	5.5	6.3	6.0	6.5	4.9	4.1	4.7	8.2	4.5	4.8	5.2	5.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	4.48	3.85	5.22	4.74	4.74	3.67	2.91	3.00	4.75	2.61	3.21	3.12	3.85	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.7	4.9	5.7	5.3	5.9	4.7	5.2	4.6	6.1	5.7	5.1	3.8	5.3	
EFFLUENT (MG/L)	0.4	0.3	0.3	0.3	0.4	0.4	0.5	0.5	0.3	1.1*	0.4	0.2	0.4	1
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	0.32	0.21	0.24	0.23	0.29	0.30	0.35	0.32	0.17	0.63	0.26	0.12	0.28	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	NO

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES

	START DATE	END DATE	ANTICIPATED COMPLIANCE
EQUIPMENT/MAINTENANCE - NEW EQUIPMENT BEING INSTALLED	1989/10	1989/11	1989/11

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : MILVERTON
PLANT : MILVERTON LAGOON
WORKS NUMBER : 110001079
TREATMENT : CONVENTIONAL LAGOON SEASONAL
: AERATED CELL FLOW LAGOON
: PHOSPHORUS REMOVAL CONTINUOUS
DESIGN CAPACITY : 1.01 (1000 M3)

REGION : SOUTHWEST
DISTRICT : PERTH
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : BOYLE DRAIN
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 1,484

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.73	0.55	0.72	0.78	0.76	0.79	0.49	0.95	0.47	0.58	0.68	0.58	0.67	
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	96.00	672.00	ND	384.00	
BODS														
INFLUENT (MG/L)	126.0	129.0	89.0	96.0	134.0	119.0	65.0	173.0	122.0	154.0	160.0	ND	124.3	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8.4	ND	8.4	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.71	ND	5.63	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	160.0	142.0	82.0	105.0	101.0	116.0	102.0	186.0	124.0	350.0	181.0	ND	149.9	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	30.4	ND	30.4	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.67	ND	20.37	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.9	8.4	5.6	6.6	7.0	7.5	8.2	11.7	9.3	10.0	16.3	ND	8.9	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.3	ND	0.3	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.20	ND	0.20	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : MITCHELL
PLANT : MITCHELL LAGOON
WORKS NUMBER : 110000472
TREATMENT : CONVENTIONAL LAGOON SEASONAL
: PHOSPHORUS REMOVAL-CONTINUOUS
:
DESIGN CAPACITY : 3.56 (1000 M3)

REGION : SOUTHWEST
DISTRICT : PERTH
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : THAMES RIVER
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 3,078

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	2.94	2.28	2.78	3.15	2.26	2.23	1.77	1.74	1.82	1.89	2.72	2.02	2.30	
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BOD5														
INFLUENT (MG/L)	338.0	451.0	403.0	276.0	530.0	403.0	414.0	359.0	574.0	593.0	173.0	296.0	400.8	
EFFLUENT (MG/L)	ND	ND	ND	20.2	ND	ND	ND	ND	ND	ND	16.4	16.0	17.5	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	63.63	ND	ND	ND	ND	ND	ND	44.60	32.32	40.25	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	199.0	375.0	226.0	237.0	390.0	228.0	232.0	132.0	636.0	531.0	192.0	320.0	308.2	
EFFLUENT (MG/L)	ND	ND	ND	41.4	ND	ND	ND	ND	ND	ND	41.5	23.2	35.4	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	130.41	ND	ND	ND	ND	ND	ND	112.88	46.86	81.42	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	11.4	11.9	8.7	7.1	12.5	9.6	12.5	10.5	17.2	11.7	13.0	13.7	11.7	
EFFLUENT (MG/L)	ND	ND	ND	0.8	ND	ND	ND	ND	ND	ND	0.5	0.7	0.7	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	2.52	ND	ND	ND	ND	ND	ND	1.36	1.41	1.61	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES	START DATE	END DATE	ANTICIPATED COMPLIANCE
OPERATIONAL/PROCESS - CONVERTING TO ALTERNATIVE PROCESS	1988	1992/12	

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : MOORE
PLANT : ARGOON P.V. (ARGOON
WORKS NUMBER : 110000023
TREATMENT : CONVENTIONAL (ARGOON ANNUAL
: PHOSPHORUS REMOVAL - BATCH
:
DESIGN CAPACITY : 0.33 (1000 M3)

REGION : SOUTHWEST
DISTRICT : LAMBTON
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : BEAR CREEK
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 641

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.22	0.22	0.27	0.27	0.24	0.27	0.22	0.24	0.26	0.26	0.28	0.25	0.25	
(ARGOON DISCHARGE	ND	ND	ND	44.52	ND	ND	ND	ND	ND	ND	ND	ND	44.52	
BOD5														
INFLUENT (MG/L)	ND	179.0	159.0	113.0	146.0	133.0	176.0	213.0	201.0	182.0	169.0	202.0	170.3	
EFFLUENT (MG/L)	ND	ND	ND	13.6	ND	ND	ND	ND	ND	ND	ND	ND	13.6	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	3.67	ND	ND	ND	ND	ND	ND	ND	ND	3.40	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	ND	131.0	156.0	134.0	154.0	151.0	163.0	314.0	202.0	283.0	112.0	125.0	175.0	
EFFLUENT (MG/L)	ND	ND	ND	44.3	ND	ND	ND	ND	ND	ND	ND	ND	44.3*	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	11.96	ND	ND	ND	ND	ND	ND	ND	ND	11.08	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	ND	10.1	9.3	8.2	9.2	9.6	10.7	8.2	9.9	10.4	9.4	11.4	9.7	
EFFLUENT (MG/L)	ND	ND	ND	0.9	ND	ND	ND	ND	ND	ND	ND	ND	0.9	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	0.24	ND	ND	ND	ND	ND	ND	ND	ND	0.23	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	NO
TP	1.0 MG/L	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES	START DATE	END DATE	ANTICIPATED COMPLIANCE
FACILITY EXPANSION/UPGRADING - ENGINEERING STUDY PHASE	1988/02	1990/01	1990/04

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : MOORE
PLANT : CORUNNA P.V. WPCP
WORKS NUMBER : 110000481
TREATMENT : EXTENDED AERATION
: PHOSPHORUS REMOVAL-CONTINUOUS
:
DESIGN CAPACITY : 4.54 (1000 M3)

REGION : SOUTHWEST
DISTRICT : LAMBTON
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : ST. CLAIR RIVER
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 5,650

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	2.16	2.10	2.31	2.20	2.06	2.19	1.93	1.92	2.16	2.09	2.33	2.84	2.19	
BOD5														
INFLUENT (MG/L)	89.0	119.0	175.0	108.0	111.0	107.0	119.0	111.0	103.0	210.0	150.0	170.0	131.0	
EFFLUENT (MG/L)	3.7	11.9	8.7	4.2	7.5	3.7	3.6	0.6	4.0	4.7	7.7	3.7	5.3	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	7.99	24.99	20.09	9.24	15.45	8.10	6.94	1.15	8.64	9.82	17.94	10.50	11.61	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	91.0	122.0	192.0	97.0	98.0	101.0	82.0	118.0	127.0	208.0	76.0	89.0	116.8	
EFFLUENT (MG/L)	11.2	12.8	10.9	7.6	9.1	7.0	5.3	5.9	8.5	8.3	10.3	7.7	8.7	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	24.19	26.88	25.17	16.72	18.74	15.33	10.22	11.32	18.36	17.34	23.99	21.86	19.05	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	7.1	6.9	7.0	6.4	3.8	6.3	7.0	6.4	6.3	9.2	6.5	7.5	6.7	
EFFLUENT (MG/L)	0.3	0.5	0.2	0.1	0.1	0.2	0.3	0.5	0.4	0.3	0.2	0.2	0.3	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	0.64	1.05	0.46	0.22	0.20	0.43	0.57	0.96	0.86	0.62	0.46	0.56	0.66	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : MOORE
PLANT : COURTRIGHT WPCP
WORKS NUMBER : 110001818
TREATMENT : EXTENDED AERATION
: PHOSPHORUS REMOVAL-CONTINUOUS
:
DESIGN CAPACITY : 0.68 (1000 M3)

REGION : SOUTHWEST
DISTRICT : LAMBTON
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : ST CLAIR RIVER
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 1,926

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.55	0.50	0.61	0.61	0.55	0.53	0.47	0.47	0.54	0.50	0.56	0.46	0.53	
BOD5														
INFLUENT (MG/L)	105.0	561.0	215.0	115.0	215.0	118.0	102.0	111.0	78.0	163.0	155.0	263.0	183.4	
EFFLUENT (MG/L)	12.0	9.5	8.7	3.2	4.1	4.8	4.2	3.3	15.0	3.5	3.6	2.9	6.2	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	6.60	4.75	5.30	1.95	2.25	2.54	1.97	1.55	8.10	1.75	2.01	1.33	3.29	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	133.0	715.0	347.0	114.0	269.0	99.0	89.0	73.0	81.0	136.0	116.0	542.0	226.2	
EFFLUENT (MG/L)	19.3	11.1	15.1	4.7	4.1	8.9	7.6	9.4	11.3	0.9	2.0	3.2	8.1	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	10.61	5.55	9.21	2.86	2.25	4.71	3.57	4.41	6.10	0.45	1.12	1.47	4.29	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	7.5	20.2	10.0	7.8	8.9	9.2	7.1	6.1	6.3	6.3	9.0	16.6	9.6	
EFFLUENT (MG/L)	0.3	0.3	0.2	0.1	0.2	0.2	0.2	0.2	0.3	0.2	0.1	0.1	0.2	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	0.16	0.15	0.12	0.06	0.11	0.10	0.09	0.09	0.16	0.10	0.05	0.04	0.11	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NO REMEDIAL MEASURES REPORTED

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : NORMANBY
PLANT : NEUSTADT LAGOON
WORKS NUMBER : 110002443
TREATMENT : CONVENTIONAL LAGOON SEASONAL
: PHOSPHORUS REMOVAL - BATCH
:
DESIGN CAPACITY : 0.41 (1000 M3)

REGION : SOUTHWEST
DISTRICT : GREY
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : SOUTH SAUGEEN RIVER
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 463

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.17	0.12	0.18	0.18	0.15	0.13	0.09	0.08	0.08	0.09	0.15	0.13	0.13	
LAGOON DISCHARGE	ND	ND	ND	ND	39.14	ND	ND	ND	ND	ND	ND	ND	39.14	
BOD5														
INFLUENT (MG/L)	97.0	125.0	113.0	85.0	151.0	114.0	121.0	142.0	229.0	127.0	145.0	134.0	131.9	
EFFLUENT (MG/L)	ND	ND	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	2.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	0.37	ND	ND	ND	ND	ND	ND	ND	0.33	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	96.0	121.0	112.0	70.0	136.0	152.0	82.0	142.0	292.0	131.0	169.0	131.0	136.2	
EFFLUENT (MG/L)	ND	ND	ND	ND	7.6	ND	ND	ND	ND	ND	ND	ND	7.6	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	1.14	ND	ND	ND	ND	ND	ND	ND	0.99	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	5.1	7.4	6.6	5.0	5.7	7.9	7.0	8.7	10.6	9.8	9.1	6.5	7.5	
EFFLUENT (MG/L)	ND	ND	ND	ND		ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	ND		ND	ND	ND	ND	ND	ND	ND		

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES	START DATE	END DATE	ANTICIPATED COMPLIANCE
FACILITY EXPANSION/UPGRADING - ENGINEERING STUDY PHASE	1988/02	1990/01	

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : NORWICH
PLANT : NORWICH LAGOON
WORKS NUMBER : 110001480
TREATMENT : CONVENTIONAL LAGOON SEASONAL
: PHOSPHORUS REMOVAL-CONTINUOUS
:
DESIGN CAPACITY : 0.99 (1000 M3)

REGION : SOUTHWEST
DISTRICT : OXFORD
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : BIG OTTER CREEK
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 2,313

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.86	0.77	0.88	1.02	0.79	0.81	0.67	0.65	0.62	0.64	0.99	0.74	0.79	
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BOD5														
INFLUENT (MG/L)	100.0	149.0	145.0	71.0	136.0	208.0	189.0	140.0	166.0	175.0	227.0	236.0	161.8	
EFFLUENT (MG/L)	ND	ND	ND	12.7	ND	ND	ND	ND	ND	1.9	12.3	ND	9.0	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	12.95	ND	ND	ND	ND	ND	1.21	12.17	ND	7.11	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	279.0	144.0	337.0	103.0	270.0	216.0	159.0	162.0	122.0	99.0	170.0	147.0	184.0	
EFFLUENT (MG/L)	ND	ND	ND	6.5	ND	ND	ND	ND	ND	2.4	19.2	ND	9.4	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	6.63	ND	ND	ND	ND	ND	1.53	19.00	ND	7.43	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	7.0	8.2	8.4	5.1	7.0	9.1	9.3	5.2	7.9	7.7	10.3	10.1	7.9	
EFFLUENT (MG/L)	ND	ND	ND	0.3	ND	ND	ND	ND	ND	0.3	0.5	ND	0.4	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	0.30	ND	ND	ND	ND	ND	0.19	0.49	ND	0.32	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	1.0 MG/L	YES

NO REMEDIAL MEASURES REPORTED

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : OIL SPRINGS
PLANT : OIL SPRINGS LAGOON
WORKS NUMBER : 110001998
TREATMENT : CONVENTIONAL LAGOON ANNUAL
: PHOSPHORUS REMOVAL - BATCH
:
DESIGN CAPACITY : 0.27 (1000 M3)

REGION : SOUTHWEST
DISTRICT : LAMBTON
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : BLACK CREEK
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 609

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.18	0.17	0.20	0.23	0.16	0.18	0.15	0.15	0.20	0.17	0.20	0.17	0.18	
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BOD5														
INFLUENT (MG/L)	97.0	45.0	14.0	102.0	119.0	112.0	113.0	115.0	113.0	133.0	162.0	101.0	102.2	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.4	ND	ND	3.4	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.57	ND	ND	0.61	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	87.0	53.0	24.0	68.0	109.0	68.0	115.0	93.0	113.0	88.0	101.0	61.0	81.7	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	29.4	ND	ND	29.4*	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.99	ND	ND	5.29	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.9	8.5	4.5	7.8	7.0	8.0	7.9	8.1	7.7	6.5	7.9	8.5	7.4	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.3	ND	ND	0.3	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.05	ND	ND	0.05	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	NO
TP	1.0 MG/L	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES

	START DATE	END DATE	ANTICIPATED COMPLIANCE
FACILITY EXPANSION/UPGRADING - ENGINEERING STUDY PHASE	1988/02	1990/01	1990/04

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : OWEN SOUND
PLANT : OWEN SOUND WPCP
WORKS NUMBER : 110000551
TREATMENT : PRIMARY
: PHOSPHORUS REMOVAL CONTINUOUS
:
DESIGN CAPACITY : 24.54 (1000 M3)

REGION : SOUTHWEST
DISTRICT : GREY
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : GEORGIAN BAY
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 20,000

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	17.33	13.04	20.25	15.56	12.92	15.00	10.67	10.58	10.67	10.54	15.17	11.74	13.62	
BOD5														
INFLUENT (MG/L)	62.0	74.0	82.0	43.0	81.0	50.0	97.0	118.0	101.0	172.0	142.0	97.0	93.3	
EFFLUENT (MG/L)	23.6	27.4	21.1	22.0	29.6	14.6	27.8	25.3	36.4	34.7	31.7	20.0	26.2	
LOADING (KG/D)	408.98	357.29	427.27	342.52	382.45	219.00	296.62	267.67	388.58	365.73	480.88	234.80	356.84	
PERCENT REMOVAL	62	63	74	49	63	71	71	79	64	80	78	79	72	
PERCENT REMOVAL LIMITS													50	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	104.0	119.0	104.0	108.0	110.0	113.0	118.0	123.0	132.0	116.0	136.0	117.0	116.7	
EFFLUENT (MG/L)	28.7	18.7	22.0	18.4	20.8	23.8	18.3	25.4	28.5	20.1	22.0	23.5	22.5	
LOADING (KG/D)	497.37	243.84	445.50	286.30	268.73	357.00	195.26	268.73	304.09	211.85	333.74	275.89	306.45	
PERCENT REMOVAL	72	84	79	83	81	79	84	79	78	83	84	80	81	
PERCENT REMOVAL LIMITS													70	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	3.8	4.6	3.5	2.2	3.9	3.4	4.3	5.9	4.9	5.2	4.2	4.4	4.2	
EFFLUENT (MG/L)	0.9	0.7	0.7	0.5	0.5	0.5	0.9	0.5	1.0	1.0	1.0	0.4	0.7	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	15.59	9.12	14.17	7.78	6.46	7.50	9.60	5.29	10.67	10.54	15.17	4.69	9.53	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	50%	YES
SS	70%	YES
TP	1.0 MG/L	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES	START DATE	END DATE	ANTICIPATED COMPLIANCE
COLLECTION SYSTEM - ENFORCING SEWER-USE BYLAWS	1989	1990/06	1990/01
MANPOWER - ADDITIONAL STAFF BEING HIRED	1989	1989/06	

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : PAISLEY
PLANT : PAISLEY WPCP
WORKS NUMBER : 110001907
TREATMENT : OXIDATION DITCH
: PHOSPHORUS REMOVAL-CONTINUOUS
:
DESIGN CAPACITY : 0.70 (1000 M3)

REGION : SOUTHWEST
DISTRICT : BRUCE
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : SAUGEEN RIVER
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 653

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.41	0.32	0.39	0.35	0.30	0.34	0.28	0.28	0.29	0.32	0.37	0.35	0.33	
BOD5														
INFLUENT (MG/L)	60.0	108.0	109.0	65.0	86.0	67.0	87.0	114.0	89.0	84.0	68.0	114.0	87.6	
EFFLUENT (MG/L)	3.7	7.8	4.3	2.3	1.6	1.8	0.9	1.3	1.3	2.0	2.5	5.9	3.0	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	1.51	2.49	1.67	0.80	0.48	0.61	0.25	0.36	0.37	0.64	0.92	2.06	0.99	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	96.0	266.0	136.0	60.0	105.0	96.0	150.0	103.0	138.0	101.0	219.0	91.0	130.1	
EFFLUENT (MG/L)	4.9	14.7	4.7	2.5	3.0	3.0	2.6	4.1	1.6	2.6	5.6	16.3	5.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	2.00	4.70	1.83	0.87	0.90	1.02	0.72	1.14	0.46	0.83	2.07	5.70	1.82	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	5.6	5.4	5.5	4.4	5.8	5.9	6.3	5.5	6.1	5.0	5.1	6.1	5.6	
EFFLUENT (MG/L)	0.4	0.8	0.4	0.3	0.4	0.5	0.6	0.8	0.5	0.5	0.5	0.7	0.5	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	0.16	0.25	0.15	0.10	0.12	0.17	0.16	0.22	0.14	0.16	0.18	0.24	0.17	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES

	START DATE	END DATE	ANTICIPATED COMPLIANCE
COLLECTION SYSTEM - COLLECTION SYSTEM UNDER REVIEW	1988	1991/12	

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : PETROLIA
PLANT : PETROLIA WPCP + LAGOON
WORKS NUMBER : 110000529
TREATMENT : EXTENDED AERATION
: PHOSPHOROUS REMOVAL-CONTINUOUS
: EFFLUENT POLISHING
DESIGN CAPACITY : 3.18 (1000 M3)

REGION : SOUTHWEST
DISTRICT : LAMBTON
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : BEAR CREEK
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 4,168

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.44	1.57	1.56	1.73	1.67	1.68	1.37	1.54	1.58	1.49	1.75	1.59	1.58	
BOD5														
INFLUENT (MG/L)	152.0	134.0	138.0	175.0	175.0	306.0	169.0	259.0	167.0	140.0	131.0	182.0	177.3	
EFFLUENT (MG/L)	2.7	4.4	1.9	3.4	3.4	1.5	1.2	0.4	0.9	2.2	2.2	5.9	2.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	3.88	6.90	2.96	5.88	5.67	2.52	1.64	0.61	1.42	3.27	3.85	9.38	3.95	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	183.0	165.0	166.0	173.0	173.0	344.0	235.0	239.0	200.0	119.0	105.0	112.0	184.5	
EFFLUENT (MG/L)	4.5	6.3	5.5	4.3	4.3	2.5	2.6	2.2	2.0	7.9	2.2	9.1	4.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	6.48	9.89	8.58	7.43	7.18	4.20	3.56	3.38	3.16	11.77	3.85	14.46	7.11	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	7.5	7.3	7.0	8.2	8.2	9.1	8.3	7.7	7.6	6.5	5.4	7.1	7.5	
EFFLUENT (MG/L)	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.2	0.4	0.5	0.3	0.5	0.3	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	0.43	0.62	0.46	0.51	0.50	0.50	0.41	0.30	0.63	0.74	0.52	0.79	0.47	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NO REMEDIAL MEASURES REPORTED

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : PLYMPTON
PLANT : WYOMING WPCP
WORKS NUMBER : 110002489
TREATMENT : EXTENDED AERATION
: PHOSPHORUS REMOVAL-CONTINUOUS
: EFFLUENT POLISHING
DESIGN CAPACITY : 1.12 (1000 M3)

REGION : SOUTHWEST
DISTRICT : LAMBTON
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : STONEHOUSE DRAIN
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 1,824

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.48	0.43	0.45	0.47	0.46	0.48	0.45	0.45	0.49	0.48	0.50	0.48	0.47	
BOD5														
INFLUENT (MG/L)	169.0	232.0	162.0	146.0	202.0	163.0	172.0	176.0	167.0	194.0	185.0	196.0	180.3	
EFFLUENT (MG/L)	2.1	4.3	3.1	2.2	3.2	1.6	1.2	0.4	0.8	3.1	2.0	5.1	2.4	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	1.00	1.84	1.39	1.03	1.47	0.76	0.54	0.18	0.39	1.48	1.00	2.44	1.13	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	260.0	609.0	232.0	120.0	217.0	179.0	190.0	103.0	260.0	188.0	155.0	113.0	218.8	
EFFLUENT (MG/L)	3.0	6.7	5.7	2.6	4.3	3.0	1.6	1.8	1.3	7.0	1.7	9.2	4.0	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	1.44	2.88	2.56	1.22	1.97	1.44	0.72	0.81	0.63	3.36	0.85	4.41	1.88	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	12.5	24.8	11.6	10.8	10.3	10.8	11.8	9.0	11.6	11.0	9.0	10.2	12.0	
EFFLUENT (MG/L)	0.3	0.4	0.3	0.2	0.4	0.2	0.3	0.2	0.3	0.5	0.3	0.5	0.3	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	0.14	0.17	0.13	0.09	0.18	0.09	0.13	0.09	0.14	0.24	0.15	0.24	0.14	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : POINT EDWARD
PLANT : POINT EDWARD WPCP
WORKS NUMBER : 110000597
TREATMENT : PRIMARY
: PHOSPHORUS REMOVAL-CONTINUOUS
:
DESIGN CAPACITY : 2.59 (1000 M3)

REGION : SOUTHWEST
DISTRICT : LAMBTON
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : ST. CLAIR RIVER
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 4,120

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.34	1.65	1.51	1.31	1.50	1.54	1.82	1.72	1.68	1.71	1.53	1.43	1.56	
BOD5														
INFLUENT (MG/L)	92.0	99.0	82.0	90.0	104.0	101.0	97.0	45.0	82.0	151.0	55.0	85.0	90.3	
EFFLUENT (MG/L)	66.4	69.2	62.9	56.7	71.5	86.6	63.1	72.6	63.0	64.8	79.8	94.5	70.9	
LOADING (KG/D)	88.97	114.18	94.97	74.27	107.25	133.36	114.84	124.87	105.84	110.80	122.09	135.13	110.60	
PERCENT REMOVAL	28	30	23	37	31	14	35	ND	23	57	ND	ND	21*	
PERCENT REMOVAL LIMITS													50	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	111.0	119.0	94.0	93.0	119.0	118.0	116.0	67.0	96.0	97.0	51.0	71.0	96.0	
EFFLUENT (MG/L)	41.7	55.5	60.9	42.0	66.9	60.6	55.8	43.1	55.5	52.7	52.3	71.4	54.9	
LOADING (KG/D)	55.87	91.57	91.95	55.02	100.35	93.32	101.55	74.13	93.24	90.11	80.01	102.10	85.64	
PERCENT REMOVAL	62	53	35	55	44	49	52	36	42	46	ND	ND	43*	
PERCENT REMOVAL LIMITS													70	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	15.8	6.5	4.8	5.7	5.4	7.1	5.3	2.7	4.2	6.2	3.1	5.0	6.0	
EFFLUENT (MG/L)	3.1*	3.4*	3.2*	2.8*	2.3*	3.7*	2.6*	1.1*	1.6*	2.8*	0.8	3.8*	2.6	11
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	4.15	5.61	4.83	3.66	3.45	5.69	4.73	1.89	2.68	4.78	1.22	5.43	4.06	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	50%	NO
SS	70%	NO
TP	1.0 MG/L	NO

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES

	START DATE	END DATE	ANTICIPATED COMPLIANCE
FACILITY EXPANSION/UPGRADING - FINAL DESIGN PHASE	1988	1991/12	1992/01

1989 CERTIFICATE OF APPROVAL ASSESSMENT

MUNICIPALITY : PORT BURWELL
PLANT : PORT BURWELL WPCP
WORKS NUMBER : 110001319
TREATMENT : EXTENDED AERATION
: PHOSPHORUS REMOVAL-CONTINUOUS
:
DESIGN CAPACITY : 0.52 (1000 M3)

REGION : SOUTHWEST
DISTRICT : ELGIN
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : BIG OTTER CR.- LAKE ERIE
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 780

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.20	0.18	0.19	0.23	0.22	0.22	0.22	0.22	0.20	0.20	0.21	0.17	0.21	
BOD5														
INFLUENT (MG/L)	177.0	289.0	226.0	220.0	201.0	207.0	249.0	209.0	179.0	223.0	176.0	197.0	212.8	
EFFLUENT (MG/L)	3.7	4.3	1.8	4.4	12.0	1.6	1.5	1.2	1.5	2.6	2.7	3.1	3.4	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	0.74	0.77	0.34	1.01	2.64	0.35	0.33	0.26	0.30	0.52	0.56	0.52	0.71	
LOADING LIMIT (KG/D)													13.20	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	159.0	219.0	211.0	163.0	161.0	189.0	241.0	188.0	243.0	158.0	144.0	189.0	188.8	
EFFLUENT (MG/L)	9.6	9.0	7.2	8.4	12.8	4.6	6.6	5.4	4.7	6.1	6.3	10.2	7.6	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	1.92	1.62	1.36	1.93	2.81	1.01	1.45	1.18	0.94	1.22	1.32	1.73	1.60	
LOADING LIMIT (KG/D)													13.20	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	10.3	10.9	13.0	8.8	9.6	10.6	11.7	9.7	11.3	9.4	9.6	11.5	10.5	
EFFLUENT (MG/L)	0.4	0.5	0.2	0.6	0.5	1.4	0.8	0.5	0.3	0.2	0.3	0.4	0.5	
CONCENTRATION LIMIT (MG/L)													1.0	
LOADING (KG/D)	0.08	0.09	0.03	0.13	0.11	0.30	0.17	0.11	0.06	0.04	0.06	0.06	0.11	
LOADING LIMIT (KG/D)													0.53	

SUMMARY

PARM	CRITERIA	LOADING	COMPLIES WITH CONC	COMPLIES WITH LOADING
BOD	25.0 MG/L	13.20 KG/D	YES	YES
SS	25.0 MG/L	13.20 KG/D	YES	YES
TP	1.0 MG/L	0.53 KG/D	YES	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED ANNUALLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES

	START DATE	END DATE	ANTICIPATED COMPLIANCE
OPERATIONAL/PROCESS - ELECTRONIC PROCESS CONTROL BEING IMPLEMENTED	1989/07	1989/07	1989/07

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : PORT BURWELL
PLANT : PORT BURWELL WPCP
WORKS NUMBER : 110001319
TREATMENT : EXTENDED AERATION
: PHOSPHORUS REMOVAL CONTINUOUS
:
DESIGN CAPACITY : 0.52 (1000 M3)

REGION : SOUTHWEST
DISTRICT : ELGIN
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : BIG OTTER CR. - LAKE ERIE
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 760

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.20	0.18	0.19	0.23	0.22	0.22	0.22	0.22	0.20	0.20	0.21	0.17	0.21	
BOD5														
INFLUENT (MG/L)	177.0	289.0	226.0	220.0	201.0	207.0	249.0	209.0	179.0	223.0	176.0	197.0	212.8	
EFFLUENT (MG/L)	3.7	4.3	1.8	4.4	12.0	1.6	1.5	1.2	1.5	2.6	2.7	3.1	3.4	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	0.74	0.77	0.34	1.01	2.64	0.35	0.33	0.26	0.30	0.52	0.56	0.52	0.71	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	159.0	219.0	211.0	163.0	161.0	189.0	241.0	188.0	243.0	158.0	144.0	189.0	188.8	
EFFLUENT (MG/L)	9.6	9.0	7.2	8.4	12.8	4.6	6.6	5.4	4.7	6.1	6.3	10.2	7.6	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	1.92	1.62	1.36	1.93	2.81	1.01	1.45	1.18	0.94	1.22	1.32	1.73	1.60	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	10.3	10.9	13.0	8.8	9.6	10.6	11.7	9.7	11.3	9.4	9.6	11.5	10.5	
EFFLUENT (MG/L)	0.4	0.5	0.2	0.6	0.5	1.4*	0.8	0.5	0.3	0.2	0.3	0.4	0.5	1
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	0.08	0.09	0.03	0.13	0.11	0.30	0.17	0.11	0.06	0.04	0.06	0.06	0.11	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	NO

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED ANNUALLY
* EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES	START DATE	END DATE	ANTICIPATED COMPLIANCE
OPERATIONAL/PROCESS - ELECTRONIC PROCESS CONTROL BEING IMPLEMENTED	1989/07	1989/07	1989/07

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : PORT ELGIN
PLANT : PORT ELGIN WPCP
WORKS NUMBER : 120001470
TREATMENT : OXIDATION DITCH
:
:
DESIGN CAPACITY : 6.45 (1000 M3)

REGION : SOUTHWEST
DISTRICT : BRUCE
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : SAUGEEN RIVER
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 6,115

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	5.07	4.69	3.98	4.43	3.77	3.94	3.69	3.48	3.45	3.48	3.72	3.90	3.97	
BOD5														
INFLUENT (MG/L)	40.4	72.0	105.0	106.0	66.0	67.0	228.0	60.0	68.0	74.0	91.0	55.0	86.0	
EFFLUENT (MG/L)	4.0	21.5	7.8	6.9	1.8	3.5	4.8	4.5	ND	9.1	3.4	4.2	6.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	20.28	100.83	31.04	30.56	6.78	13.79	17.71	15.66	ND	31.66	12.64	16.38	25.81	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	84.3	144.0	82.0	98.0	105.0	133.0	402.0	232.0	161.0	96.0	206.0	89.0	152.7	
EFFLUENT (MG/L)	9.9	13.8	4.6	7.1	1.7	4.6	5.8	5.8	2.5	3.9	5.1	2.2	5.6	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	50.19	64.72	18.30	31.45	6.40	18.12	21.40	20.18	8.62	13.57	18.97	8.58	22.23	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	2.9	5.3	4.5	4.6	4.6	4.2	7.1	0.4	5.0	5.5	5.6	4.1	4.5	
EFFLUENT (MG/L)	0.6	0.9	0.7	0.5	0.1	0.9	0.9	0.8	0.8	0.9	1.1	0.5	0.7	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	3.04	4.22	2.78	2.21	0.37	3.54	3.32	2.78	2.76	3.13	4.09	1.95	2.78	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	NA	NA

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : PORT STANLEY
PLANT : PORT STANLEY LAGOON
WORKS NUMBER : 1100013/3
TREATMENT : CONVENTIONAL LAGOON SEASONAL
: PHOSPHORUS REMOVAL BATCH
:
DESIGN CAPACITY : 1.49 (1000 M3)

REGION : SOUTHWEST
DISTRICT : ELGIN
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : DITCH TO KETTLE CREEK
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 2,416

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.10	0.96	1.06	1.22	1.15	1.44	1.35	1.33	1.22	1.04	1.08	0.98	1.16	
LAGOON DISCHARGE	ND	ND	ND	96.16	111.90	23.80	ND	ND	2.60	102.81	81.58	ND	69.81	
BOD5														
INFLUENT (MG/L)	48.0	45.0	54.0	40.0	33.0	103.0	167.0	42.0	72.0	46.0	45.0	59.0	62.8	
EFFLUENT (MG/L)	ND	ND	ND	24.9	16.1	3.8	ND	ND	ND	7.0	7.8	ND	11.9	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	30.37	18.51	5.47	ND	ND	ND	7.28	8.42	ND	13.80	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	43.0	58.0	53.0	22.0	21.0	88.0	108.0	60.0	59.0	28.0	42.0	36.0	51.5	
EFFLUENT (MG/L)	ND	ND	ND	30.4	11.9	6.6	ND	ND	ND	12.2	17.5	ND	15.7	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	37.08	13.68	9.50	ND	ND	ND	12.68	18.90	ND	18.21	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	3.7	3.1	3.3	2.2	1.9	4.1	6.7	2.7	3.8	3.2	3.7	4.1	3.5	
EFFLUENT (MG/L)	ND	ND	ND	0.9	0.8	1.1*	ND	ND	ND	0.5	0.3	ND	0.7	1
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	1.09	0.92	1.58	ND	ND	ND	0.52	0.32	ND	0.81	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	NO

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES	START DATE	END DATE	ANTICIPATED COMPLIANCE
FACILITY EXPANSION/UPGRADING - ENGINEERING STUDY PHASE	1988/02	1990/01	1990/04

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : RALEIGH-TILBURY EAST
PLANT : MERLIN PV LAGOON
WORKS NUMBER : 110000935
TREATMENT : CONVENTIONAL LAGOON ANNUAL
: PHOSPHORUS REMOVAL - BATCH
:
DESIGN CAPACITY : 0.46 (1000 M3)

REGION : SOUTHWEST
DISTRICT : KENT
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : FOXTON DR.- JEANETTES CK
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 523

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.16	0.16	0.15	0.17	0.20	0.20	0.16	0.15	0.16	0.16	0.17	0.16	0.17	
LAGOON DISCHARGE	ND	ND	ND	6.08	ND	ND	ND	ND	ND	ND	24.36	ND	15.22	
BOD5														
INFLUENT (MG/L)	264.0	306.0	315.0	81.0	58.0	43.0	106.0	141.0	224.0	512.0	217.0	328.0	216.3	
EFFLUENT (MG/L)	ND	ND	ND	23.2	ND	ND	ND	ND	ND	ND	8.1	ND	15.7	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	3.94	ND	ND	ND	ND	ND	ND	1.37	ND	2.67	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	481.0	447.0	321.0	53.0	39.0	43.0	98.0	86.0	217.0	660.0	158.0	204.0	233.9	
EFFLUENT (MG/L)	ND	ND	ND	126.0	ND	ND	ND	ND	ND	ND	61.1	ND	93.6*	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	21.42	ND	ND	ND	ND	ND	ND	10.38	ND	15.91	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.5	6.0	9.2	4.8	4.1	3.7	6.3	5.1	8.3	13.9	7.4	11.1	7.2	
EFFLUENT (MG/L)	ND	ND	ND	0.8	ND	ND	ND	ND	ND	ND	0.5	ND	0.7	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	0.13	ND	ND	ND	ND	ND	ND	0.08	ND	0.12	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	NO
TP	1.0 MG/L	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES	START DATE	END DATE	ANTICIPATED COMPLIANCE
FACILITY EXPANSION/UPGRADING - ENGINEERING STUDY PHASE	1988/02	1990/01	1990/04

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : RIDGETOWN
PLANT : RIDGETOWN LAGOON
WORKS NUMBER : 110001364
TREATMENT : CONVENTIONAL LAGOON SEASONAL
: PHOSPHOROUS REMOVAL CONTINUOUS
:
DESIGN CAPACITY : 1.36 (1000 M3)

REGION : SOUTHWEST
DISTRICT : KENT
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : GAWNE DR TO MCGREGOR CK
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 3,152

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.98	0.98	1.03	1.12	1.15	1.25	1.11	1.03	1.08	1.11	1.18	1.13	1.10	
LAGOON DISCHARGE	ND	ND	ND	ND	184.89	ND	ND	ND	ND	90.35	ND	ND	137.62	
BOD5														
INFLUENT (MG/L)	132.0	108.0	176.0	150.0	117.0	128.0	106.0	288.0	158.0	140.0	120.0	182.0	150.4	
EFFLUENT (MG/L)	ND	ND	ND	ND	26.8	ND	ND	ND	ND	5.7	ND	ND	16.3	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	ND	30.82	ND	ND	ND	ND	6.32	ND	ND	17.93	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	243.0	153.0	229.0	180.0	200.0	194.0	296.0	221.0	211.0	202.0	129.0	129.0	198.9	
EFFLUENT (MG/L)	ND	ND	ND	ND	70.4	ND	ND	ND	ND	22.4	ND	ND	46.4*	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	ND	80.96	ND	ND	ND	ND	24.86	ND	ND	51.04	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	7.8	8.1	9.5	9.4	8.3	5.9	6.6	7.3	8.1	8.5	6.6	7.3	7.8	
EFFLUENT (MG/L)	ND	ND	ND	ND	1.1*	ND	ND	ND	ND	1.5*	ND	ND	1.3	2
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	ND	1.26	ND	ND	ND	ND	1.66	ND	ND	1.43	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	NO
TP	1.0 MG/L	NO

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES	START DATE	END DATE	ANTICIPATED COMPLIANCE
OPERATIONAL/PROCESS - PROCESS CONTROL BEING UPGRADED	1989	1990/01	1990/04

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : RODNEY
PLANT : RODNEY LAGOON
WORKS NUMBER : 110001667
TREATMENT : CONVENTIONAL LAGOON SEASONAL
: PHOSPHORUS REMOVAL - BATCH
:
DESIGN CAPACITY : 0.54 (1000 M3)

REGION : SOUTHWEST
DISTRICT : ELGIN
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : SIXTEEN MILE CK.
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 1,027

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.35	0.34	0.34	0.38	0.37	0.44	0.39	0.38	0.36	0.36	0.41	0.28	0.37	
LAGOON DISCHARGE	ND	ND	ND	91.12	ND	ND	ND	ND	ND	135.96	ND	ND	113.54	
BOD5														
INFLUENT (MG/L)	828.0	82.0	125.0	135.0	170.0	76.0	296.0	59.0	104.0	435.0	556.0	436.0	275.2	
EFFLUENT (MG/L)	ND	ND	ND	22.2	ND	ND	ND	ND	ND	12.0	ND	ND	17.1	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	8.43	ND	ND	ND	ND	ND	4.32	ND	ND	6.33	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	382.0	27.0	69.0	69.0	88.0	35.0	116.0	45.0	38.0	235.0	255.0	263.0	135.2	
EFFLUENT (MG/L)	ND	ND	ND	38.5	ND	ND	ND	ND	ND	24.1	ND	ND	31.3*	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	14.63	ND	ND	ND	ND	ND	8.67	ND	ND	11.58	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	11.1	2.7	7.1	3.6	8.2	3.1	6.6	4.1	4.6	8.7	8.6	10.1	6.5	
EFFLUENT (MG/L)	ND	ND	ND	0.6	ND	ND	ND	ND	ND	0.4	ND	ND	0.5	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	0.22	ND	ND	ND	ND	ND	0.14	ND	ND	0.19	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	NO
TP	1.0 MG/L	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES

	START DATE	END DATE	ANTICIPATED COMPLIANCE
FACILITY EXPANSION/UPGRADING - FINAL DESIGN PHASE	1988	1991/12	

1989 CERTIFICATE OF APPROVAL ASSESSMENT

MUNICIPALITY : ROMNEY TWP-WHEATLY VILL
PLANT : WHEATLY WPCP
WORKS NUMBER : 110003246
TREATMENT : EXTENDED AERATION
: PHOSPHORUS REMOVAL CONTINUOUS
:
DESIGN CAPACITY : 2.75 (1000 M3)

REGION : SOUTHWEST
DISTRICT : KENT
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : LAKE ERIE
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 2,320

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.78	0.64	0.78	1.30	1.31	1.04	0.91	0.90	1.02	1.05	1.02	0.82	0.96	
BOD5														
INFLUENT (MG/L)	172.0	213.0	183.0	355.0	437.0	309.0	324.0	643.0	465.0	805.0	381.0	292.0	381.6	
EFFLUENT (MG/L)	4.2	3.8	2.3	4.2	3.6	2.2	1.6	1.7	2.9	2.7	2.8	1.6	2.8	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	3.27	2.43	1.79	5.46	4.71	2.28	1.45	1.53	2.95	2.83	2.85	1.31	2.69	
LOADING LIMIT (KG/D)													68.80	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	204.0	200.0	301.0	347.0	298.0	211.0	295.0	360.0	375.0	252.0	195.0	154.0	266.0	
EFFLUENT (MG/L)	12.4	10.3	7.4	9.2	6.8	4.1	5.2	3.3	6.8	6.4	8.1	6.5	7.2	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	9.67	6.59	5.77	11.96	8.90	4.26	4.73	2.97	6.93	6.72	8.26	5.33	6.91	
LOADING LIMIT (KG/D)													68.80	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	10.1	9.8	8.3	12.3	10.9	11.3	11.9	10.6	12.0	20.2	9.7	10.9	11.5	
EFFLUENT (MG/L)	0.5	0.4	0.3	0.5	0.4	0.3	0.4	0.4	0.5	0.5	0.4	0.4	0.4	
CONCENTRATION LIMIT (MG/L)													1.0	
LOADING (KG/D)	0.39	0.25	0.23	0.65	0.52	0.31	0.36	0.36	0.51	0.52	0.40	0.32	0.38	
LOADING LIMIT (KG/D)													2.75	

SUMMARY

PARM	CRITERIA	LOADING	COMPLIES WITH CONC	COMPLIES WITH LOADING
BOD	25.0 MG/L	68.80 KG/D	YES	YES
SS	25.0 MG/L	68.80 KG/D	YES	YES
TP	1.0 MG/L	2.75 KG/D	YES	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED ANNUALLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES	START DATE	END DATE	ANTICIPATED COMPLIANCE
FACILITY EXPANSION/UPGRADING - ENGINEERING STUDY PHASE	1988	1992/12	

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : ROMNEY TWP-WHEATLY VILL
PLANT : WHEATLY WPCP
WORKS NUMBER : 110003246
TREATMENT : EXTENDED AERATION
: PHOSPHORUS REMOVAL-CONTINUOUS
:
DESIGN CAPACITY : 2.75 (1000 M3)

REGION : SOUTHWEST
DISTRICT : KENT
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : LAKE ERIE
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 2,328

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.78	0.64	0.78	1.30	1.31	1.04	0.91	0.90	1.02	1.05	1.02	0.82	0.96	
BOD5														
INFLUENT (MG/L)	172.0	213.0	183.0	355.0	437.0	309.0	324.0	643.0	465.0	805.0	381.0	292.0	381.6	
EFFLUENT (MG/L)	4.2	3.8	2.3	4.2	3.6	2.2	1.6	1.7	2.9	2.7	2.8	1.6	2.8	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	3.27	2.43	1.79	5.46	4.71	2.28	1.45	1.53	2.95	2.83	2.85	1.31	2.69	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	204.0	200.0	301.0	347.0	298.0	211.0	295.0	360.0	375.0	252.0	195.0	154.0	266.0	
EFFLUENT (MG/L)	12.4	10.3	7.4	9.2	6.8	4.1	5.2	3.3	6.8	6.4	8.1	6.5	7.2	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	9.67	6.59	5.77	11.96	8.90	4.26	4.73	2.97	6.93	6.72	8.26	5.33	6.91	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	10.1	9.8	8.3	12.3	10.9	11.3	11.9	10.6	12.0	20.2	9.7	10.9	11.5	
EFFLUENT (MG/L)	0.5	0.4	0.3	0.5	0.4	0.3	0.4	0.4	0.5	0.5	0.4	0.4	0.4	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	0.39	0.25	0.23	0.65	0.52	0.31	0.36	0.36	0.51	0.52	0.40	0.32	0.38	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED ANNUALLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES

	START DATE	END DATE	ANTICIPATED COMPLIANCE
FACILITY EXPANSION/UPGRADING - ENGINEERING STUDY PHASE	1988	1992/12	

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : SARNIA
PLANT : SARNIA WPCP
WORKS NUMBER : 120000907
TREATMENT : PRIMARY
: PHOSPHORUS REMOVAL-CONTINUOUS
:
DESIGN CAPACITY : 65.91 (1000 M3)

REGION : SOUTHWEST
DISTRICT : LAMBTON
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : ST. CLAIR RIVER
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 64,475

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	34.19	32.47	37.19	38.68	36.53	39.03	ND	35.99	ND	ND	35.02	31.66	35.64	
BOD5														
INFLUENT (MG/L)	174.0	155.0	130.0	169.0	125.0	134.0	107.0	ND	104.0	174.0	178.0	199.0	149.9	
EFFLUENT (MG/L)	64.0	52.0	36.0	75.0	46.0	51.0	48.0	ND	43.0	68.0	76.0	98.0	59.7	
LOADING (KG/D)	2188.16	1688.44	1338.84	2901.00	1680.38	1990.53	ND	ND	ND	ND	2661.52	3102.68	2127.71	
PERCENT REMOVAL	63	66	72	56	63	62	55		59	61	57	51	60	
PERCENT REMOVAL LIMITS													50	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	146.0	169.0	152.0	132.0	146.0	107.0	94.0	125.0	127.0	177.0	177.0	252.0	150.3	
EFFLUENT (MG/L)	27.0	24.0	22.0	19.0	24.0	19.0	20.0	16.0	15.0	19.0	22.0	30.0	21.4	
LOADING (KG/D)	923.13	779.28	818.18	734.92	876.72	741.57	ND	575.84	ND	ND	770.44	949.80	762.70	
PERCENT REMOVAL	82	86	86	86	84	82	79	87	88	89	88	88	86	
PERCENT REMOVAL LIMITS													70	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	5.7	ND	ND	4.6	5.7	4.3	4.0	4.8	5.0	7.0	5.6	8.6	5.5	
EFFLUENT (MG/L)	1.1*	ND	ND	0.8	0.9	0.7	0.7	0.7	0.7	0.8	0.9	1.0	0.8	1
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	37.60	ND	ND	30.94	32.87	27.32	ND	25.19	ND	ND	31.51	31.66	28.51	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	50%	YES
SS	70%	YES
TP	1.0 MG/L	NO

NO REMEDIAL MEASURES REPORTED

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : SEAFORTH
PLANT : SEAFORTH LAGOON
WORKS NUMBER : 110001177
TREATMENT : CONVENTIONAL LAGOON SEASONAL
: PHOSPHORUS REMOVAL-CONTINUOUS
:
DESIGN CAPACITY : 1.01 (1000 M3)

REGION : SOUTHWEST
DISTRICT : HURON
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : CRESSWELL CREEK
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 2,153

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.76	1.40	1.80	1.97	1.41	1.32	1.02	0.91	0.88	0.87	1.28	1.13	1.31	
LAGOON DISCHARGE	ND	39.20	55.78	46.54	ND	ND	ND	ND	ND	ND	47.54	ND	47.27	
BOD5														
INFLUENT (MG/L)	207.0	236.0	107.0	165.0	184.0	252.0	368.0	343.0	325.0	175.0	156.0	425.0	245.3	
EFFLUENT (MG/L)	ND	23.9	41.9	34.5	ND	ND	ND	ND	ND	2.7	12.4	ND	23.1	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	33.46	75.42	67.96	ND	ND	ND	ND	ND	2.34	15.87	ND	30.26	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	181.0	354.0	168.0	121.0	151.0	175.0	246.0	292.0	306.0	196.0	119.0	213.0	210.2	
EFFLUENT (MG/L)	ND	46.5	22.2	16.9	ND	ND	ND	ND	ND	3.3	14.3	ND	20.6	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	65.10	39.96	33.29	ND	ND	ND	ND	ND	2.87	18.30	ND	26.99	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	3.2	5.0	3.6	3.0	4.6	4.3	6.5	7.3	7.2	6.4	3.3	4.5	4.9	
EFFLUENT (MG/L)	ND	0.6	0.5	0.5	ND	ND	ND	ND	ND	0.4	0.4	ND	0.5	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	0.84	0.90	0.98	ND	ND	ND	ND	ND	0.34	0.51	ND	0.66	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES	START DATE	END DATE	ANTICIPATED COMPLIANCE
FACILITY EXPANSION/UPGRADING - FINAL DESIGN PHASE	1988	1991/12	

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : SOMBRA
PLANT : PORT LAMBTON LAGOON
WORKS NUMBER : 110001694
TREATMENT : CONVENTIONAL LAGOON SEASONAL
: PHOSPHORUS REMOVAL BATCH
:
DESIGN CAPACITY : 1.08 (1000 M3)

REGION : SOUTHWEST
DISTRICT : LAMBTON
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : MARSHY CK.TO ST.CLAIR R.
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 900

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.58	0.36	0.41	0.44	0.37	0.45	0.38	0.39	0.60	0.42	0.45	0.34	0.42	
LAGOON DISCHARGE	ND	ND	ND	84.68	ND	ND	ND	ND	ND	16.49	40.91	ND	47.36	
BOD5														
INFLUENT (MG/L)	ND	111.0	103.0	99.0	131.0	114.0	167.0	135.0	84.0	115.0	119.0	187.0	124.1	
EFFLUENT (MG/L)	ND	ND	ND	1.5	ND	ND	ND	ND	ND	0.3	3.0	ND	1.6	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	0.66	ND	ND	ND	ND	ND	0.12	1.35	ND	0.67	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	ND	137.0	123.0	82.0	141.0	103.0	132.0	145.0	96.0	121.0	90.0	144.0	119.5	
EFFLUENT (MG/L)	ND	ND	ND	13.5	ND	ND	ND	ND	ND	3.9	13.7	ND	10.4	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	5.94	ND	ND	ND	ND	ND	1.63	6.16	ND	4.37	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	ND	6.7	6.8	12.4	7.7	7.6	8.1	7.6	4.6	8.0	6.7	8.0	7.7	
EFFLUENT (MG/L)	ND	ND	ND	0.2	ND	ND	ND	ND	ND	0.1	0.2	ND	0.2	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	0.08	ND	ND	ND	ND	ND	0.04	0.09	ND	0.08	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES	START DATE	END DATE	ANTICIPATED COMPLIANCE
FACILITY EXPANSION/UPGRADING - ENGINEERING STUDY PHASE	1988/02	1990/01	

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : SOMBRA
PLANT : SOMBRA LAGOON
WORKS NUMBER : 110001685
TREATMENT : CONVENTIONAL LAGOON SEASONAL
: PHOSPHORUS REMOVAL - BATCH
:
DESIGN CAPACITY : 0.96 (1000 M3)

REGION : SOUTHWEST
DISTRICT : LAMBTON
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : ST. CLAIR RIVER
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 641

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.19	0.17	0.22	0.21	0.18	0.20	0.17	0.16	0.24	0.18	0.20	0.17	0.19	
LAGOON DISCHARGE	ND	ND	ND	59.69	ND	ND	ND	ND	ND	ND	ND	ND	59.69	
BOD5														
INFLUENT (MG/L)	ND	127.0	106.0	69.0	200.0	103.0	132.0	258.0	106.0	238.0	96.0	109.0	140.4	
EFFLUENT (MG/L)	ND	ND	ND	2.2	ND	ND	ND	ND	ND	ND	ND	ND	2.2	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	0.46	ND	ND	ND	ND	ND	ND	ND	ND	0.42	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	ND	81.0	85.0	62.0	172.0	74.0	118.0	323.0	82.0	235.0	46.0	56.0	121.3	
EFFLUENT (MG/L)	ND	ND	ND	12.1	ND	ND	ND	ND	ND	ND	ND	ND	12.1	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	2.54	ND	ND	ND	ND	ND	ND	ND	ND	2.30	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	ND	7.1	5.8	4.2	9.4	7.6	8.4	7.1	5.9	8.3	6.3	6.7	7.0	
EFFLUENT (MG/L)	ND	ND	ND	0.1	ND	ND	ND	ND	ND	ND	ND	ND	0.1	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	0.02	ND	ND	ND	ND	ND	ND	ND	ND	0.02	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES

	START DATE	END DATE	ANTICIPATED COMPLIANCE
FACILITY EXPANSION/UPGRADING - ENGINEERING STUDY PHASE	1988/02	1990/01	

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : SOUTHAMPTON
PLANT : SOUTHAMPTON WPCP
WORKS NUMBER : 1[illegible]
TREATMENT : OXIDATION DITCH

DESIGN CAPACITY : 3.04 (1000 M3)

REGION : SOUTHWEST
DISTRICT : BRUCE
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : SAUGEEN R.
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 2,866

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.29	1.05	1.35	1.42	1.18	1.29	1.28	1.20	0.94	0.90	1.05	0.97	1.16	
BOD5														
INFLUENT (MG/L)	55.0	41.0	62.0	63.0	53.0	59.0	75.0	91.0	73.0	82.0	70.0	60.0	65.3	
EFFLUENT (MG/L)	4.4	3.7	4.5	3.5	4.6	4.0	2.0	2.0	1.4	2.7	4.3	3.7	3.4	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	5.67	3.88	6.07	4.97	5.42	5.16	2.56	2.40	1.31	2.43	4.51	3.58	3.94	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	133.0	74.0	108.0	98.0	66.0	67.0	120.0	134.0	95.0	146.0	108.0	125.0	106.2	
EFFLUENT (MG/L)	6.4	3.9	4.6	5.7	8.4	3.6	3.9	2.1	2.4	2.8	7.7	5.2	4.7	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	8.25	4.09	6.21	8.09	9.91	4.64	4.99	2.52	2.25	2.52	8.08	5.04	5.45	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	3.3	3.5	3.5	2.7	3.2	4.3	5.7	5.4	5.1	4.0	3.8	3.3	4.0	
EFFLUENT (MG/L)	2.1	2.6	1.7	1.9	3.2	3.3	4.1	3.9	3.2	4.2	3.5	2.4	3.0	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	2.70	2.73	2.29	2.69	3.77	4.25	5.24	4.68	3.00	3.78	3.67	2.32	3.48	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	NA	NA

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES

	START DATE	END DATE	ANTICIPATED COMPLIANCE
SLUDGE DISPOSAL/REMOVAL - UPGRADING SLUDGE STORAGE FACILITIES	1988	1991/12	

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : ST EDMUNDS
PLANT : TOBERMORY LAGOON
WORKS NUMBER : 120001577
TREATMENT : AERATED CELL PLUS LAGOON
: EXFILTRATION LAGOON
:
DESIGN CAPACITY : 0.16 (1000 M3)

REGION : SOUTHWEST
DISTRICT : BRUCE
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : NO DISC.TO SURFACE WATER
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 300

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BOD5														
INFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
SUSPENDED SOLIDS														
INFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	NA	NO DIRECT DISCHARGE
SS	NA	NO DIRECT DISCHARGE
TP	NA	NO DIRECT DISCHARGE

NOTE:
BOD - HAS NO CRITERIA
SS - HAS NO CRITERIA
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : ST. MARYS
PLANT : ST. MARYS WPCP
WORKS NUMBER : [illegible]
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL CONTINUOUS

DESIGN CAPACITY : 4.64 (1000 M3)

REGION : SOUTHWEST
DISTRICT : PERTH
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : THAMES RIVER
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 4,568

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	4.80	4.46	5.16	5.34	4.48	4.59	ND	4.01	3.89	3.86	4.18	4.26	4.46	
BOD														
INFLUENT (MG/L)	185.0	324.0	268.0	156.0	186.0	240.0	ND	178.0	222.0	211.0	164.0	143.0	207.0	
EFFLUENT (MG/L)	21.6	5.4	5.1	10.1	4.5	12.4	ND	6.8	3.4	3.0	12.0	4.2	8.0	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	103.98	24.08	26.31	53.93	20.16	56.91	ND	27.26	13.22	11.58	50.16	17.89	35.68	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	308.0	323.0	179.0	111.0	136.0	226.0	ND	161.0	162.0	131.0	96.0	143.0	179.6	
EFFLUENT (MG/L)	8.1	3.8	6.2	14.4	6.9	11.3	ND	8.7	6.7	8.5	6.4	9.1	8.2	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	38.88	16.94	31.99	76.89	30.91	51.86	ND	34.88	26.06	32.81	26.75	38.76	36.57	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.7	8.7	6.7	4.9	6.7	7.1	ND	5.7	7.7	6.7	5.6	5.7	6.6	
EFFLUENT (MG/L)	0.7	0.4	0.4	0.3	0.2	0.6	ND	0.3	0.3	0.4	0.4	0.4	0.4	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	3.36	1.78	2.06	1.60	0.89	2.75	ND	1.20	1.16	1.54	1.67	1.70	1.78	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (E.G. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES

	START DATE	END DATE	ANTICIPATED COMPLIANCE
FACILITY EXPANSION/UPGRADING - CONSTRUCTION COMPLETE	1988	1990/02	

1989 CERTIFICATE OF APPROVAL ASSESSMENT

MUNICIPALITY : ST THOMAS
PLANT : ST THOMAS WPCP
WORKS NUMBER : 120001112
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL-CONTINUOUS
:
DESIGN CAPACITY : 40.91 (1000 M3)

REGION : SOUTHWEST
DISTRICT : ELGIN
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : KETTLE CREEK
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 28,218

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	ND	16.89	16.28	20.46	17.16	19.70	15.25	14.96	13.64	12.61	14.70	12.46	15.83	
BOD5														
INFLUENT (MG/L)	107.0	176.0	113.0	113.0	136.0	51.0	55.0	86.0	113.0	1,436.0	105.0	75.0	213.8	
EFFLUENT (MG/L)	9.3	26.1	10.9	7.4	4.8	3.5	4.4	2.1	3.4	2.4	3.8	3.7	6.8	
CONCENTRATION LIMIT (MG/L)													15.0	
LOADING (KG/D)	ND	440.82	177.45	151.40	82.36	68.95	67.10	31.41	46.37	30.26	55.86	46.10	107.64	
LOADING LIMIT (KG/D)														
SUSPENDED SOLIDS														
INFLUENT (MG/L)	126.0	504.0	92.0	165.0	123.0	40.0	59.0	133.0	159.0	3,865.0	93.0	38.0	449.8	
EFFLUENT (MG/L)	8.4	19.4	19.9	7.6	3.8	4.8	4.7	4.2	4.9	6.4	3.2	3.7	7.6	
CONCENTRATION LIMIT (MG/L)													20.0	
LOADING (KG/D)	ND	327.66	323.97	155.49	65.20	94.56	71.67	62.83	66.83	80.70	47.04	46.10	120.31	
LOADING LIMIT (KG/D)														
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	5.9	22.0	6.5	4.6	5.2	4.3	5.2	5.2	6.2	52.5	6.0	4.6	10.7	
EFFLUENT (MG/L)	0.8	1.0	1.0	0.8	1.1	0.8	1.0	1.2	1.0	1.1	1.0	0.7	1.0	
CONCENTRATION LIMIT (MG/L)													1.0	
LOADING (KG/D)	ND	16.89	16.28	16.36	18.87	15.76	15.25	17.95	13.64	13.87	14.70	8.72	15.83	
LOADING LIMIT (KG/D)														

SUMMARY

PARM	CRITERIA	LOADING	COMPLIES WITH CONC	COMPLIES WITH LOADING
BOD	15.0 MG/L	NA	YES	NA
SS	20.0 MG/L	NA	YES	NA
TP	1.0 MG/L	NA	YES	NA

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED ANNUALLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES

	START DATE	END DATE	ANTICIPATED COMPLIANCE
SLUDGE DISPOSAL/REMOVAL - UPGRADING WASTE DISPOSAL SITE			

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : ST THOMAS
PLANT : ST THOMAS WPCP
WORKS NUMBER : [illegible]
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL CONTINUOUS
:
DESIGN CAPACITY : 42.91 (1000 M3)

REGION : SOUTHWEST
DISTRICT : ELGIN
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : KETTLE CREEK
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 28,218

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	ND	16.89	16.28	20.46	17.16	19.70	15.25	14.96	13.64	12.61	14.70	12.46	15.83	
BOD5														
INFLUENT (MG/L)	107.0	176.0	113.0	113.0	136.0	51.0	55.0	86.0	113.0	1,436.0	105.0	75.0	213.8	
EFFLUENT (MG/L)	9.3	26.1	10.9	7.4	4.8	3.5	4.4	2.1	3.4	2.4	3.8	3.7	6.8	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	440.82	177.45	151.40	82.36	68.95	67.10	31.41	46.37	30.26	55.86	46.10	107.64	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	126.0	504.0	92.0	165.0	123.0	40.0	59.0	133.0	159.0	3,865.0	93.0	38.0	449.8	
EFFLUENT (MG/L)	8.4	19.4	19.9	7.6	3.8	4.8	4.7	4.2	4.9	6.4	3.2	3.7	7.6	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	327.66	323.97	155.49	65.20	94.56	71.67	62.83	66.83	80.70	47.04	46.10	120.31	
TOTAL PHOSPHORUS														
INFLUENT (MG/L)	5.9	22.0	6.5	4.6	5.2	4.3	5.2	5.2	6.2	52.5	6.0	4.6	10.7	
EFFLUENT (MG/L)	0.8	1.0	1.0	0.8	1.1*	0.8	1.0	1.2*	1.0	1.1*	1.0	0.7	1.0	3
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	16.89	16.28	16.36	18.87	15.76	15.25	17.95	13.64	13.87	14.70	8.72	15.83	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	NO

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES

	START DATE	END DATE	ANTICIPATED COMPLIANCE
SLUDGE DISPOSAL/REMOVAL	UPGRADING WASTE DISPOSAL SITE		

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : STEPHEN
PLANT : GRAND BEND LAGOON
WORKS NUMBER : 110002452
TREATMENT : CONVENTIONAL LAGOON SEASONAL
: PHOSPHORUS REMOVAL - BATCH
:
DESIGN CAPACITY : 1.89 (1000 M3)

REGION : SOUTHWEST
DISTRICT : HURON
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : AUSABLE RIVER
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 1,310

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.70	0.69	0.56	0.90	1.07	1.35	1.79	1.64	1.15	0.96	0.90	0.73	1.04	
LAGOON DISCHARGE	ND	ND	ND	ND	189.95	ND	ND	ND	ND	90.47	ND	ND	140.21	
BOD5														
INFLUENT (MG/L)	117.0	101.0	141.0	86.0	ND	76.0	200.0	205.0	ND	404.0	70.0	89.0	148.9	
EFFLUENT (MG/L)	ND	ND	ND	ND	6.9	ND	ND	ND	ND	5.5	ND	ND	6.2	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	7.38	ND	ND	ND	ND	5.28	ND	ND	6.45	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	208.0	67.0	193.0	63.0	ND	109.0	125.0	146.0	ND	117.0	63.0	43.0	113.4	
EFFLUENT (MG/L)	ND	ND	ND	ND	50.8	ND	ND	ND	ND	22.6	ND	ND	36.7*	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	54.35	ND	ND	ND	ND	21.69	ND	ND	38.17	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.0	5.3	5.4	5.1	ND	4.5	6.7	11.4	ND	5.6	3.7	4.2	5.8	
EFFLUENT (MG/L)	ND	ND	ND	ND	0.2	ND	ND	ND	ND	0.2	ND	ND	0.2	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	ND	0.21	ND	ND	ND	ND	0.19	ND	ND	0.21	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	NO
TP	1.0 MG/L	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES	START DATE	END DATE	ANTICIPATED COMPLIANCE
FACILITY EXPANSION/UPGRADING - ENGINEERING STUDY PHASE	1988/02	1990/01	1990/04

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : STEPHEN
PLANT : HURON PARK WPCP
WORKS NUMBER : 110005488
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
:
DESIGN CAPACITY 1.81 (1000 M3)

REGION : SOUTHWEST
DISTRICT : HURON
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : AUSABLE RIVER
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 1,400

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.28	1.11	1.41	1.45	1.12	1.05	0.92	0.88	0.89	1.13	1.65	1.23	1.18	
BOD5														
INFLUENT (MG/L)	92.0	81.0	85.0	97.0	64.0	40.0	57.0	63.0	83.0	76.0	83.0	69.0	74.2	
EFFLUENT (MG/L)	5.9	6.1	5.7	3.0	9.8	12.8	6.8	2.4	2.7	5.6	2.0	2.0	5.4	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	7.55	6.77	8.03	4.35	10.97	13.44	6.25	2.11	2.40	6.32	3.30	2.46	6.37	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	62.0	67.0	81.0	75.0	53.0	51.0	45.0	104.0	77.0	142.0	94.0	50.0	75.1	
EFFLUENT (MG/L)	5.8	6.1	4.9	3.0	7.4	11.3	11.3	5.8	5.9	5.8	3.6	6.3	6.4	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	7.42	6.77	6.90	4.35	8.28	11.86	10.39	5.10	5.25	6.55	5.94	7.74	7.55	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	3.0	2.8	2.8	2.8	2.6	3.3	3.1	3.0	3.7	3.7	3.1	3.6	3.1	
EFFLUENT (MG/L)	1.7	2.5	1.6	1.6	1.7	2.1	2.5	2.3	3.3	2.4	2.6	2.3	2.2	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	2.17	2.77	2.25	2.32	1.90	2.20	2.30	2.02	2.93	2.71	4.29	2.82	2.60	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	NA	NA

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : STRATFORD
PLANT : STRATFORD WPCP
WORKS NUMBER : 110000702
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL-CONTINUOUS
: EFFLUENT POLISHING
DESIGN CAPACITY : 27.27 (1000 M3)

REGION : SOUTHWEST
DISTRICT : PERTH
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : AVON RIVER
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 26,078

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	23.62	20.08	26.25	27.86	21.15	24.19	17.16	17.08	16.90	17.53	25.42	17.96	21.27	
BOD5														
INFLUENT (MG/L)	80.0	97.0	51.0	73.0	91.0	63.0	77.0	78.0	97.0	117.0	80.0	90.0	82.8	
EFFLUENT (MG/L)	8.7	12.2	7.2	10.2	11.4	16.0	16.8	15.0	10.0	11.1	12.1	8.1	11.6	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	205.49	244.97	189.00	284.17	241.11	387.04	288.28	256.20	169.00	194.58	307.58	145.47	246.73	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	70.0	99.0	75.0	65.0	98.0	71.0	101.0	102.0	102.0	119.0	70.0	56.0	85.7	
EFFLUENT (MG/L)	2.6	2.8	6.3	1.8	3.5	3.7	3.2	2.7	2.3	3.0	2.4	3.7	3.2	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	61.41	56.22	165.37	50.14	74.02	89.50	54.91	46.11	38.87	52.59	61.00	66.45	68.06	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	4.0	5.7	2.8	4.7	4.8	4.1	5.0	5.0	5.7	5.5	4.0	5.2	4.7	
EFFLUENT (MG/L)	0.4	0.9	0.8	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.6	0.4	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	9.44	18.07	21.00	5.57	4.23	4.83	3.43	3.41	3.38	3.50	10.16	10.77	8.51	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES

	START DATE	END DATE	ANTICIPATED COMPLIANCE
FACILITY EXPANSION/UPGRADING - FINAL DESIGN PHASE	1988	1990/12	

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : STRATHROY
PLANT : STRATHROY LAGOON
WORKS NUMBER : 1210000827
TREATMENT : AERATED LAGOON
: CONTINUOUS DISCHARGE
: PHOSPHORUS REMOVAL CONTINUOUS
DESIGN CAPACITY : 5.18 (1000 M3)

REGION : SOUTHWEST
DISTRICT : MIDDLESEX
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : SYDENHAM RIVER
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 9,051

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	2.54	2.30	2.40	2.49	2.24	2.20	3.48	2.43	2.64	4.05	2.34	1.93	2.59	
LAGOON DISCHARGE	211.88	128.85	134.45	74.65	69.30	65.92	ND	ND	29.03	51.23	55.86	ND	91.24	
BOD5														
INFLUENT (MG/L)	109.0	124.0	115.0	90.0	150.0	129.0	92.0	113.0	217.0	144.0	104.0	156.0	128.6	
EFFLUENT (MG/L)	11.9	11.4	8.9	4.1	14.6	21.1	ND	ND	5.6	8.6	6.3	11.1	10.4	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	30.22	26.22	21.36	10.20	32.70	46.42	ND	ND	14.78	34.83	14.74	21.42	26.94	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	237.0	358.0	154.0	126.0	173.0	194.0	295.0	186.0	207.0	232.0	147.0	147.0	204.7	
EFFLUENT (MG/L)	23.3	14.3	8.1	8.4	26.3	50.6	ND	ND	15.3	10.5	6.7	7.0	17.1	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	59.18	32.89	19.44	20.91	58.91	111.32	ND	ND	40.39	42.52	15.67	13.51	44.29	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	5.3	6.1	5.6	4.7	5.8	6.3	5.4	5.5	9.9	6.2	5.7	7.8	6.2	
EFFLUENT (MG/L)	0.4	0.5	0.3	0.2	1.0	1.2*	ND	ND	1.3*	0.5	0.4	0.5	0.6	2
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	1.01	1.15	0.72	0.49	2.24	2.64	ND	ND	3.43	2.02	0.93	0.96	1.55	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	1.0 MG/L	NO

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES

	START DATE	END DATE	ANTICIPATED COMPLIANCE
INFLUENT SEWAGE - ENFORCING SEWER USE BYLAW	1989/04	1991	1991/06
EQUIPMENT/MAINTENANCE - NEW EQUIPMENT BEING INSTALLED	1990/05	1990/07	1990/07
EQUIPMENT/MAINTENANCE - EXISTING EQUIPMENT BEING REPAIRED	1988/09	1989/03	1989/03

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : THAMESVILLE
PLANT : THAMESVILLE WPCP
WORKS NUMBER : 110002470
TREATMENT : EXTENDED AERATION
: PHOSPHORUS REMOVAL-CONTINUOUS
:
DESIGN CAPACITY : 0.81 (1000 M3)

REGION : SOUTHWEST
DISTRICT : KENT
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : THAMES RIVER
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 985

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.23	0.22	0.21	0.22	0.23	0.25	0.24	0.24	0.23	0.24	0.24	0.25	0.23	
BOD5														
INFLUENT (MG/L)	103.0	139.0	127.0	135.0	114.0	184.0	71.0	125.0	155.0	196.0	142.0	232.0	143.6	
EFFLUENT (MG/L)	12.7	5.9	6.3	4.0	4.5	2.3	1.3	4.2	2.8	2.1	2.8	4.3	4.4	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	2.92	1.29	1.32	0.88	1.03	0.57	0.31	1.00	0.64	0.50	0.67	1.07	1.01	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	75.0	120.0	107.0	89.0	92.0	98.0	85.0	110.0	148.0	143.0	79.0	55.0	100.1	
EFFLUENT (MG/L)	13.9	7.6	7.2	11.4	8.7	3.5	6.0	5.5	5.5	5.5	6.2	9.9	7.6	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	3.19	1.67	1.51	2.50	2.00	0.87	1.44	1.32	1.26	1.32	1.48	2.47	1.75	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	8.0	9.1	8.4	6.8	8.0	3.8	5.3	5.6	7.1	9.0	6.9	6.9	7.1	
EFFLUENT (MG/L)	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.6	0.6	0.7	0.7	0.5	0.5	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	0.11	0.11	0.08	0.08	0.09	0.10	0.09	0.14	0.13	0.16	0.16	0.12	0.12	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES

	START DATE	END DATE	ANTICIPATED COMPLIANCE
EQUIPMENT/MAINTENANCE - NEW EQUIPMENT BEING INSTALLED	1989/10	1989/11	1989/11

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : THEDFORD
PLANT : THEDFORD LAGOON
WORKS NUMBER : 110002336
TREATMENT : CONVENTIONAL LAGOON ANNUAL
:
:
DESIGN CAPACITY : 0.48 (1000 M3)

REGION : SOUTHWEST
DISTRICT : LAMBTON
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : DECKER CREEK
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 675

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.23	0.21	0.22	0.21	0.18	0.17	0.26	0.26	0.15	0.18	0.22	0.21	0.21	
LAGOON DISCHARGE	ND	ND	ND	ND	42.84	ND	ND	ND	ND	ND	ND	ND	42.84	
BOD5														
INFLUENT (MG/L)	99.0	88.0	116.0	70.0	ND	104.0	166.0	176.0	254.0	393.0	190.0	200.0	168.7	
EFFLUENT (MG/L)	ND	ND	ND	ND	1.9	ND	ND	ND	ND	ND	ND	ND	1.9	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	ND	0.34	ND	ND	ND	ND	ND	ND	ND	0.40	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	113.0	55.0	60.0	115.0	ND	100.0	177.0	1,024.0	225.0	446.0	147.0	64.0	229.6	
EFFLUENT (MG/L)	ND	ND	ND	ND	6.3	ND	ND	ND	ND	ND	ND	ND	6.3	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	ND	1.13	ND	ND	ND	ND	ND	ND	ND	1.32	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.4	5.2	6.5	5.0	ND	6.2	7.3	7.9	7.6	13.3	9.3	5.5	7.3	
EFFLUENT (MG/L)	ND	ND	ND	ND	0.1	ND	ND	ND	ND	ND	ND	ND	0.1	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	0.01	ND	ND	ND	ND	ND	ND	ND	0.02	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	NA	NA

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES	START DATE	END DATE	ANTICIPATED COMPLIANCE
FACILITY EXPANSION/UPGRADING - ENGINEERING STUDY PHASE	1988/02	1990/01	

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : THORNBURY
PLANT : THORNBURY LAGOON
WORKS NUMBER : 110001890
TREATMENT : AERATED CELL PLUS LAGOON
: SUMMER STORAGE
:
DESIGN CAPACITY : 1.72 (1000 M3)

REGION : SOUTHWEST
DISTRICT : GREY
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : BEAVER RIVER
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 1,764

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.59	1.26	1.87	1.78	1.68	1.71	1.28	1.15	1.07	1.08	1.25	1.26	1.42	
LAGOON DISCHARGE	49.27	35.13	59.17	126.73	147.93	ND	ND	ND	ND	33.51	37.42	39.19	66.04	
BOD5														
INFLUENT (MG/L)	119.0	99.0	60.0	88.0	252.0	38.0	24.0	54.0	14.0	32.0	37.0	25.0	70.2	
EFFLUENT (MG/L)	3.1	3.9	9.1	12.4	7.8	ND	ND	ND	ND	1.8	4.5	2.3	5.6	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	4.92	4.91	17.01	22.07	13.10	ND	ND	ND	ND	1.94	5.62	2.89	7.95	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	110.0	80.0	90.0	54.0	194.0	42.0	21.0	29.0	10.0	36.0	42.0	16.0	60.3	
EFFLUENT (MG/L)	2.3	7.1	7.4	29.0	17.8	ND	ND	ND	ND	2.9	6.4	3.4	9.5	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	3.65	8.94	13.83	51.62	29.90	ND	ND	ND	ND	3.13	8.00	4.28	13.49	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	2.1	2.9	3.5	ND	2.8	2.9	1.9	3.0	1.3	2.1	2.5	1.3	2.4	
EFFLUENT (MG/L)	1.7	1.8	1.9	1.6	1.7	ND	ND	ND	ND	2.9	0.8	0.9	1.7	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	2.70	2.26	3.55	2.84	2.85	ND	ND	ND	ND	3.13	1.00	1.13	2.41	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	NA	NA

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES

	START DATE	END DATE	ANTICIPATED COMPLIANCE
FACILITY EXPANSION/UPGRADING - ENGINEERING STUDY PHASE	1988	1991/12	

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : TILBURY
PLANT : TILBURY LAGOON
WORKS NUMBER : 120000916
TREATMENT : CONVENTIONAL LAGOON SEASONAL
: PHOSPHORUS REMOVAL CONTINUOUS
:
DESIGN CAPACITY : 2.53 (1000 M3)

REGION : SOUTHWEST
DISTRICT : KENT
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : TILBURY CREEK
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 4,200

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	4.16	4.07	5.00	5.46	6.46	4.00	4.02	4.02	ND	ND	ND	ND	4.65	
LAGOON DISCHARGE	130.00	114.00	193.00	385.00	539.00	ND	ND	ND	ND	ND	ND	ND	272.20	
BOD5														
INFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
SUSPENDED SOLIDS														
INFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	INSUFFICIENT DATA
SS	40.0 MG/L	INSUFFICIENT DATA
TP	1.0 MG/L	INSUFFICIENT DATA

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : TILBURY NORTH
PLANT : STONEY POINT P.V. LAGOON
WORKS NUMBER : 110002345
TREATMENT : CONVENTIONAL LAGOON SEASONAL
: PHOSPHORUS REMOVAL - BATCH
:
DESIGN CAPACITY : 0.95 (1000 M3)

REGION : SOUTHWEST
DISTRICT : ESSEX
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : LITTLE CREEK
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 1,305

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.74	0.58	0.62	0.88	0.71	1.17	1.10	0.69	0.58	0.53	0.60	0.49	0.72	
LAGOON DISCHARGE	ND	ND	ND	ND	226.94	ND	ND	ND	ND	ND	126.52	ND	176.73	
BOD5														
INFLUENT (MG/L)	39.0	65.0	67.0	38.0	40.0	33.0	19.0	36.0	64.0	70.0	83.0	73.0	52.3	
EFFLUENT (MG/L)	ND	ND	ND	ND	8.2	ND	ND	ND	ND	ND	3.7	ND	6.0	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	5.82	ND	ND	ND	ND	ND	2.22	ND	4.32	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	52.0	71.0	46.0	29.0	34.0	51.0	26.0	31.0	61.0	53.0	70.0	31.0	46.3	
EFFLUENT (MG/L)	ND	ND	ND	ND	34.1	ND	ND	ND	ND	ND	16.1	ND	25.1*	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	24.21	ND	ND	ND	ND	ND	9.66	ND	18.07	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	3.0	4.7	3.0	3.1	2.2	2.4	1.8	3.6	4.5	4.1	5.0	4.4	3.5	
EFFLUENT (MG/L)	ND	ND	ND	ND	0.4	ND	ND	ND	ND	ND	0.4	ND	0.4	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	ND	0.28	ND	ND	ND	ND	ND	0.24	ND	0.29	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	NO
TP	1.0 MG/L	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES	START DATE	END DATE	ANTICIPATED COMPLIANCE
FACILITY EXPANSION/UPGRADING - ENGINEERING STUDY PHASE	1988/02	1990/01	

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : TILBURY WEST
PLANT : COMBER LAGOON
WORKS NUMBER : 110001676
TREATMENT : CONVENTIONAL LAGOON SEASONAL
: PHOSPHORUS REMOVAL - BATCH

DESIGN CAPACITY : 0.40 (1000 M3)

REGION : SOUTHWEST
DISTRICT : ESSEX
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : GOVN'T DR NO.1 TO BIG CK
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 780

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.35	0.29	0.35	0.46	0.34	0.39	0.37	0.25	0.27	0.29	0.30	0.27	0.33	
LAGOON DISCHARGE	ND	ND	ND	ND	80.95	ND	ND	ND	ND	ND	41.08	ND	61.02	
BOD5														
INFLUENT (MG/L)	73.0	116.0	118.0	71.0	177.0	105.0	117.0	158.0	123.0	107.0	390.0	127.0	140.2	
EFFLUENT (MG/L)	ND	ND	ND	ND	6.5	ND	ND	ND	ND	ND	5.2	ND	5.9	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	2.21	ND	ND	ND	ND	ND	1.56	ND	1.95	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	93.0	118.0	103.0	56.0	142.0	163.0	133.0	142.0	114.0	90.0	495.0	44.0	141.1	
EFFLUENT (MG/L)	ND	ND	ND	ND	6.0	ND	ND	ND	ND	ND	8.9	ND	7.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	2.04	ND	ND	ND	ND	ND	2.67	ND	2.48	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	5.2	7.5	6.4	4.5	8.8	8.0	7.8	7.8	7.4	6.2	12.1	5.6	7.3	
EFFLUENT (MG/L)	ND	ND	ND	ND	0.1	ND	ND	ND	ND	ND	0.3	ND	0.2	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	ND	0.03	ND	ND	ND	ND	ND	0.09	ND	0.07	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES	START DATE	END DATE	ANTICIPATED COMPLIANCE
FACILITY EXPANSION/UPGRADING - ENGINEERING STUDY PHASE	1988/02	1990/01	

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : TILLSONBURG
PLANT : TILLSONBURG WPCP
WORKS NUMBER : 110000757
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL-CONTINUOUS
:
DESIGN CAPACITY : 5.91 (1000 M3)

REGION : SOUTHWEST
DISTRICT : OXFORD
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : BIG OTTER CREEK
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 11,000

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	4.43	4.20	4.25	4.69	4.45	4.51	4.18	4.22	4.34	4.22	4.62	4.13	4.35	
BOD5														
INFLUENT (MG/L)	137.0	113.0	115.0	149.0	143.0	144.0	138.0	101.0	121.0	151.0	123.0	167.0	133.5	
EFFLUENT (MG/L)	2.9	2.9	10.4	4.5	2.4	9.7	1.0	0.8	2.2	2.7	2.3	3.4	3.8	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	12.84	12.18	44.20	21.10	10.68	43.74	4.18	3.37	9.54	11.39	10.62	14.04	16.53	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	162.0	160.0	193.0	145.0	214.0	159.0	167.0	174.0	167.0	260.0	155.0	233.0	182.4	
EFFLUENT (MG/L)	9.5	10.4	11.7	9.9	9.4	5.6	5.2	3.9	5.7	6.3	5.8	8.8	7.7	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	42.08	43.68	49.72	46.43	41.83	25.25	21.73	16.45	24.73	26.58	26.79	36.34	33.50	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	8.3	6.3	5.4	ND	6.4	7.6	7.3	7.9	6.9	8.3	7.3	6.8	7.1	
EFFLUENT (MG/L)	0.7	0.8	0.8	0.9	0.6	0.8	0.6	0.7	0.7	0.6	0.8	0.7	0.7	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	3.10	3.36	3.40	4.22	2.67	3.60	2.50	2.95	3.03	2.53	3.69	2.89	3.05	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NO REMEDIAL MEASURES REPORTED

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : TUCKERSMITH
PLANT : VAN ASTRA WPCP
WORKS NUMBER : 110035013
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL-CONTINUOUS

DESIGN CAPACITY 1.40 (1000 M3)

REGION : SOUTHWEST
DISTRICT : HURON
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : MUN DRAIN TO BAYFIELD R.
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 770

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.88	0.58	0.86	0.84	0.68	0.61	0.43	0.40	0.42	0.51	0.86	0.59	0.64	
BOD5														
INFLUENT (MG/L)	40.0	110.0	74.0	39.0	74.0	70.0	109.0	151.0	199.0	59.0	44.0	71.0	86.7	
EFFLUENT (MG/L)	7.1	4.4	3.6	4.3	2.5	3.8	2.2	0.1	2.6	1.8	9.3	8.9	4.2	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	6.24	2.55	3.09	3.61	1.70	2.31	0.94	0.04	1.09	0.91	7.99	5.25	2.69	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	49.0	132.0	90.0	39.0	67.0	110.0	120.0	243.0	380.0	77.0	40.0	61.0	117.3	
EFFLUENT (MG/L)	12.2	5.2	6.4	10.0	4.1	8.6	5.1	3.8	4.9	4.6	18.5	14.1	8.1	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	10.73	3.01	5.50	8.40	2.78	5.24	2.19	1.52	2.05	2.34	15.91	8.31	5.18	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	2.1	4.7	4.2	2.9	3.8	4.9	5.3	6.7	8.6	3.4	2.7	4.2	4.5	
EFFLUENT (MG/L)	0.5	0.2	0.3	0.4	0.3	0.3	0.2	0.1	0.2	0.2	0.7	0.5	0.3	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	0.44	0.11	0.25	0.33	0.20	0.18	0.08	0.04	0.08	0.10	0.60	0.29	0.19	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES

	START DATE	END DATE	ANTICIPATED COMPLIANCE
COLLECTION SYSTEM - COLLECTION SYSTEM UNDER REVIEW	1990/01	1992/12	

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : WALKERTON
PLANT : WALKERTON WPCP
WORKS NUMBER : 120001489
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL-CONTINUOUS
:
DESIGN CAPACITY : 7.54 (1000 M3)

REGION : SOUTHWEST
DISTRICT : BRUCE
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : SAUGEEN RIVER
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 4,591

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	4.50	4.87	6.54	5.99	5.22	5.43	4.66	4.21	4.33	5.16	6.12	5.91	5.25	
BOD5														
INFLUENT (MG/L)	195.0	189.0	184.0	195.0	358.0	230.0	355.0	298.0	329.0	277.0	252.0	364.0	268.8	
EFFLUENT (MG/L)	5.9	9.0	8.8	12.7	13.4	8.0	4.7	4.6	4.9	7.9	7.0	5.8	7.7	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	26.55	43.83	57.55	76.07	69.94	43.44	21.90	19.36	21.21	40.76	42.84	34.27	40.43	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	182.0	166.0	128.0	122.0	156.0	150.0	295.0	208.0	270.0	149.0	241.0	142.0	184.1	
EFFLUENT (MG/L)	8.4	11.0	9.2	6.4	10.1	5.3	7.7	7.7	4.3	6.3	7.0	5.8	7.4	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	37.80	53.57	60.16	38.33	52.72	28.77	35.88	32.41	18.61	32.50	42.84	34.27	38.85	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	7.0	6.7	4.3	5.7	6.2	6.2	7.1	7.2	7.9	6.6	6.3	6.1	6.4	
EFFLUENT (MG/L)	0.9	1.0	1.0	1.0	0.8	0.7	0.6	0.7	0.8	0.7	0.7	1.0	0.8	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	4.05	4.87	6.54	5.99	4.17	3.80	2.79	2.94	3.46	3.61	4.28	5.91	4.20	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NO REMEDIAL MEASURES REPORTED

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : WALLACEBURG
PLANT : WALLACEBURG WPCP
WORKS NUMBER : 1100000784
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHOROUS REMOVAL-CONTINUOUS
:
DESIGN CAPACITY : 6.81 (1000 M3)

REGION : SOUTHWEST
DISTRICT : KENT
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : SYDENHAM RIVER
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 10,056

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVER. DAILY FLOW (1000 M3)	5.72	5.93	6.36	7.18	6.48	7.34	5.94	5.85	6.86	6.54	7.86	6.01	6.51	
BOD5														
INFLUENT (MG/L)	85.0	98.0	105.0	98.0	101.0	97.0	74.0	98.0	91.0	91.0	93.0	83.0	92.8	
EFFLUENT (MG/L)	7.4	6.5	11.7	8.8	12.3	13.9	4.0	13.0	11.2	7.2	9.1	12.6	9.8	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	42.32	38.54	74.41	63.18	79.70	102.02	23.76	76.05	76.83	47.08	71.52	75.72	63.80	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	241.0	264.0	211.0	218.0	230.0	146.0	120.0	151.0	202.0	109.0	180.0	201.0	189.4	
EFFLUENT (MG/L)	9.7	9.8	6.3	8.8	14.9	13.5	4.9	7.3	4.1	4.7	4.2	17.5	8.8	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	55.48	58.11	40.06	63.18	96.55	99.09	29.10	42.70	28.12	30.73	33.01	105.17	57.29	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	5.6	4.2	9.1	8.3	4.5	4.3	3.9	5.5	5.5	5.8	4.4	5.2	5.5	
EFFLUENT (MG/L)	0.4	0.4	1.9*	0.8	0.5	0.8	0.4	0.6	0.5	0.9	0.6	1.6*	0.8	2
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	2.28	2.37	12.08	5.74	3.24	5.87	2.37	3.51	3.43	5.88	4.71	9.61	5.21	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	NO

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES	START DATE	END DATE	ANTICIPATED COMPLIANCE
COLLECTION SYSTEM - ENFORCING SEWER-USE BYLAWS	1989	1990/12	1990/01
FACILITY EXPANSION/UPGRADING - APPLICATION FOR FUNDING	1988	1992/12	

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : WATFORD
PLANT : WATFORD LAGOON
WORKS NUMBER : 110001809
TREATMENT : CONVENTIONAL LAGOON SEASONAL
: PHOSPHORUS REMOVAL - BATCH
:
DESIGN CAPACITY : 1.05 (1000 M3)

REGION : SOUTHWEST
DISTRICT : LAMBTON
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : BEAR CREEK
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 1,467

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.53	0.48	0.55	0.56	0.49	0.51	0.44	0.46	0.54	0.53	0.65	0.54	0.52	
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BOD5														
INFLUENT (MG/L)	88.0	119.0	138.0	167.0	144.0	151.0	158.0	176.0	178.0	170.0	184.0	154.0	152.3	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.4	ND	ND	3.4	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.80	ND	ND	1.77	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	83.0	83.0	90.0	125.0	124.0	103.0	60.0	110.0	158.0	92.0	86.0	72.0	98.8	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	10.8	ND	ND	10.8	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.72	ND	ND	5.62	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.1	6.9	7.5	6.5	6.5	6.6	6.5	6.3	ND	6.4	7.3	8.5	6.8	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6	ND	ND	0.6	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.31	ND	ND	0.31	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES

	START DATE	END DATE	ANTICIPATED COMPLIANCE
FACILITY EXPANSION/UPGRADING - ENGINEERING STUDY PHASE	1988/02	1990/01	

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : WEST LORNE
PLANT : WEST LORNE LAGOON
WORKS NUMBER : 110001337
TREATMENT : CONVENTIONAL LAGOON SEASONAL
: PHOSPHORUS REMOVAL - BATCH
:
DESIGN CAPACITY : 0.67 (1000 M3)

REGION : SOUTHWEST
DISTRICT : ELGIN
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : ZOLLER DRAIN
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 1,367

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.58	ND	0.60	0.62	0.53	0.66	0.49	0.44	0.48	0.49	0.56	0.47	0.54	
LAGOON DISCHARGE	ND	ND	ND	78.90	ND	ND	ND	ND	ND	104.35	ND	ND	91.63	
BOD5														
INFLUENT (MG/L)	162.0	122.0	246.0	112.0	208.0	126.0	138.0	126.0	101.0	136.0	152.0	150.0	148.3	
EFFLUENT (MG/L)	ND	ND	ND	9.2	ND	ND	ND	ND	ND	3.8	ND	ND	6.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	5.70	ND	ND	ND	ND	ND	1.86	ND	ND	3.51	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	144.0	88.0	266.0	98.0	13.0	107.0	111.0	101.0	186.0	103.0	148.0	93.0	121.5	
EFFLUENT (MG/L)	ND	ND	ND	16.1	ND	ND	ND	ND	ND	12.9	ND	ND	14.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	9.98	ND	ND	ND	ND	ND	6.32	ND	ND	7.83	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	8.8	5.5	10.5	2.3	3.6	6.2	6.7	6.7	8.0	5.8	5.3	6.7	6.3	
EFFLUENT (MG/L)	ND	ND	ND	0.3	ND	ND	ND	ND	ND	0.2	ND	ND	0.3	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	0.18	ND	ND	ND	ND	ND	0.09	ND	ND	0.16	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES	START DATE	END DATE	ANTICIPATED COMPLIANCE
FACILITY EXPANSION/UPGRADING - ENGINEERING STUDY PHASE	1988/02	1990/01	

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : WESTMINISTER
PLANT : SOUTHLAND PARK WPCP
WORKS NUMBER : 120000818
TREATMENT : EXTENDED AERATION
: PHOSPHORUS REMOVAL-CONTINUOUS
:
DESIGN CAPACITY : 0.26 (1000 M3)

REGION : SOUTHWEST
DISTRICT : MIDDLESEC
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : DINGMAN CREEK
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 400

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.08	0.09	
BOD5														
INFLUENT (MG/L)	112.0	105.0	106.0	143.0	126.0	107.0	123.0	132.0	103.0	109.0	75.0	108.0	112.4	
EFFLUENT (MG/L)	1.1	2.8	1.5	2.5	2.4	1.8	2.3	1.2	1.4	3.5	6.1	3.1	2.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	0.09	0.25	0.13	0.22	0.21	0.16	0.20	0.10	0.12	0.31	0.54	0.24	0.23	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	93.0	111.0	112.0	165.0	196.0	117.0	142.0	165.0	218.0	211.0	67.0	64.0	138.4	
EFFLUENT (MG/L)	0.5	2.4	1.6	4.8	3.8	2.5	1.5	1.8	1.6	4.7	7.2	4.4	3.1	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	0.04	0.21	0.14	0.43	0.34	0.22	0.13	0.16	0.14	0.42	0.64	0.35	0.28	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	9.1	6.9	10.2	5.3	8.0	4.6	7.9	5.8	6.8	6.6	6.6	4.9	6.9	
EFFLUENT (MG/L)	0.4	0.3	0.4	0.3	0.7	0.7	0.8	0.6	0.6	0.4	0.7	0.3	0.5	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	0.03	0.02	0.03	0.02	0.06	0.06	0.07	0.05	0.05	0.03	0.06	0.02	0.05	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES	START DATE	END DATE	ANTICIPATED COMPLIANCE
FACILITY EXPANSION/UPGRADING - PRELIMINARY DESIGN PHASE	1989	1992/12	

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : WESTMINSTER
PLANT : WESTMINSTER WPCP
WORKS NUMBER : 110000800
TREATMENT : EXTENDED AERATION
: PHOSPHORUS REMOVAL-CONTINUOUS
:
DESIGN CAPACITY : 1.13 (1000 M3)

REGION : SOUTHWEST
DISTRICT : MIDDLESEX
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : DINGMAN CREEK
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 6,500

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.84	1.67	1.80	2.00	1.84	2.21	2.15	2.02	1.10	1.31	1.35	1.28	1.71	
BOD5														
INFLUENT (MG/L)	96.0	146.0	142.0	72.0	101.0	100.0	145.0	208.0	146.0	94.0	173.0	129.0	129.3	
EFFLUENT (MG/L)	5.0	7.7	10.5	9.1	7.5	7.9	8.3	6.6	6.0	3.2	9.0	4.8	7.1	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	9.20	12.85	18.90	18.20	13.80	17.45	17.84	13.33	6.60	4.19	12.15	6.14	12.14	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	175.0	187.0	112.0	52.0	116.0	88.0	130.0	154.0	181.0	79.0	160.0	75.0	125.8	
EFFLUENT (MG/L)	4.4	4.8	5.3	4.4	2.7	6.3	9.4	6.0	5.2	6.5	7.2	7.4	5.8	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	8.09	8.01	9.54	8.80	4.96	13.92	20.21	12.12	5.72	8.51	9.72	9.47	9.92	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	5.0	6.4	3.7	3.3	4.0	4.4	5.5	8.4	6.7	5.2	5.9	5.6	5.3	
EFFLUENT (MG/L)	0.3	0.3	0.2	0.3	0.6	0.5	0.7	0.6	0.6	0.2	0.2	0.2	0.4	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	0.55	0.50	0.36	0.60	1.10	1.10	1.50	1.21	0.66	0.26	0.27	0.25	0.68	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : WIARTON
PLANT : WIARTON LAGOON
WORKS NUMBER : 110000819
TREATMENT : CONVENTIONAL LAGOON CONTINUOUS
: PHOSPHORUS REMOVAL-CONTINUOUS
:
DESIGN CAPACITY : 2.00 (1000 M3)

REGION : SOUTHWEST
DISTRICT : BRUCE
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : COLPOY BAY
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 2,119

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	2.19	1.56	2.49	2.30	1.66	1.63	1.28	1.43	1.56	1.57	2.41	1.86	1.83	
LAGOON DISCHARGE	67.81	43.59	77.32	68.84	51.35	48.88	39.73	44.24	46.82	48.76	72.24	57.79	55.61	
BOD5														
INFLUENT (MG/L)	64.0	78.0	58.0	74.0	78.0	72.0	96.0	103.0	88.0	89.0	44.0	67.0	75.9	
EFFLUENT (MG/L)	7.5	8.9	8.0	26.2	7.7	11.9	9.8	3.9	2.7	7.7	11.4	8.8	9.5	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	16.42	13.88	19.92	60.26	12.78	19.39	12.54	5.57	4.21	12.08	27.47	16.36	17.39	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	64.0	95.0	47.0	68.0	69.0	90.0	100.0	97.0	82.0	79.0	33.0	46.0	72.5	
EFFLUENT (MG/L)	3.0	6.4	6.0	29.9	13.2	9.2	7.0	6.4	9.3	12.7	14.2	11.3	10.7	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	6.57	9.98	14.94	68.77	21.91	14.99	8.96	9.15	14.50	19.93	34.22	21.01	19.58	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	2.9	5.0	2.4	3.5	4.4	4.6	4.9	4.0	4.8	4.4	2.2	3.3	3.9	
EFFLUENT (MG/L)	0.4	0.2	0.3	0.4	0.6	0.5	0.6	0.5	0.5	0.2	0.4	0.3	0.4	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	0.87	0.31	0.74	0.92	0.99	0.81	0.76	0.71	0.78	0.31	0.96	0.55	0.73	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES	START DATE	END DATE	ANTICIPATED COMPLIANCE
COLLECTION SYSTEM - COLLECTION SYSTEM UNDER REVIEW	1990/01	1992/12	

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : WINDSOR
PLANT : LITTLE RIVER WPCP
WORKS NUMBER : 120001096
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL CONTINUOUS
:
DESIGN CAPACITY : 36.36 (1000 M3)

REGION : SOUTHWEST
DISTRICT : ESSEX
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : LITTLE RIVER
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 64,000

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	40.38	32.10	33.30	39.60	38.40	44.00	46.00	37.60	39.50	32.90	36.40	32.50	37.72	
BOD5														
INFLUENT (MG/L)	159.0	194.0	148.0	153.0	186.0	136.0	162.0	149.0	179.0	201.0	166.0	153.0	165.5	
EFFLUENT (MG/L)	8.0	14.0	13.0	6.0	9.0	6.0	6.0	5.0	5.0	4.0	6.0	13.0	7.9	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	323.04	449.40	432.90	237.60	345.60	264.00	276.00	188.00	197.50	131.60	218.40	422.50	297.99	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	181.0	222.0	199.0	240.0	316.0	199.0	286.0	290.0	362.0	277.0	225.0	177.0	247.8	
EFFLUENT (MG/L)	9.0	10.0	6.0	6.0	8.0	7.0	8.0	10.0	6.0	8.0	9.0	8.0	7.9	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	363.42	321.00	199.80	237.60	307.20	308.00	368.00	376.00	237.00	263.20	327.60	260.00	297.99	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	5.8	7.0	5.8	6.4	7.3	6.0	6.7	7.0	8.0	8.9	6.6	6.3	6.8	
EFFLUENT (MG/L)	0.4	0.4	0.2	0.2	0.4	0.4	0.6	0.7	0.2	0.4	0.4	0.3	0.4	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	16.15	12.84	6.66	7.92	15.36	17.60	27.60	26.32	7.90	13.16	14.56	9.75	15.09	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES	START DATE	END DATE	ANTICIPATED COMPLIANCE
FACILITY EXPANSION/UPGRADING - CONSTRUCTION INITIATED	1985/05	1990/06	

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : WINDSOR
PLANT : WESTERLY WPCP
WORKS NUMBER : 120001103
TREATMENT : PRIMARY
: PHOSPHORUS REMOVAL-CONTINUOUS
:
DESIGN CAPACITY : 163.65 (1000 M3)

REGION : SOUTHWEST
DISTRICT : ESSEX
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : DETROIT RIVER
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 123,000

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	109.10	102.70	111.70	131.60	112.60	145.10	129.50	118.30	129.40	112.70	117.00	90.40	117.51	
BOD5														
INFLUENT (MG/L)	85.0	101.0	104.0	89.0	130.0	73.0	66.0	68.0	85.0	98.0	112.0	132.0	95.3	
EFFLUENT (MG/L)	33.0	41.0	34.0	35.0	43.0	29.0	29.0	30.0	44.0	57.0	44.0	50.0	39.1	
LOADING (KG/D)	3600.30	4210.70	3797.80	4606.00	4841.80	4207.90	3755.50	3549.00	5693.60	6423.90	5148.00	4520.00	4594.64	
PERCENT REMOVAL	61	59	67	61	67	60	56	56	48	42	61	62	59	
PERCENT REMOVAL LIMITS													50	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	95.0	128.0	151.0	104.0	183.0	118.0	95.0	99.0	81.0	124.0	130.0	180.0	124.0	
EFFLUENT (MG/L)	24.0	20.0	26.0	19.0	23.0	20.0	23.0	25.0	23.0	27.0	28.0	34.0	24.3	
LOADING (KG/D)	2618.40	2054.00	2904.20	2500.40	2589.80	2902.00	2978.50	2957.50	2976.20	3042.90	3276.00	3073.60	2855.49	
PERCENT REMOVAL	75	84	83	82	87	83	76	75	72	78	78	81	80	
PERCENT REMOVAL LIMITS													70	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	3.9	4.9	4.3	3.2	4.6	3.6	3.0	3.6	3.5	3.8	4.0	5.0	4.0	
EFFLUENT (MG/L)	0.6	0.7	0.7	0.4	0.9	0.5	0.5	0.7	0.7	0.8	0.6	1.1*	0.7	1
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	65.46	71.89	78.19	52.64	101.34	72.55	64.75	82.81	90.58	90.16	70.20	99.44	82.26	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	50%	YES
SS	70%	YES
TP	1.0 MG/L	NO

NO REMEDIAL MEASURES REPORTED

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : WINGHAM
PLANT : WINGHAM LAGOON
WORKS NUMBER : 110000828
TREATMENT : CONVENTIONAL LAGOON CONTINUOUS
:
:
DESIGN CAPACITY : 1.60 (1000 M3)

REGION : SOUTHWEST
DISTRICT : HURON
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : MAITLAND RIVER
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 2,941

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	3.89	2.08	2.28	2.28	1.85	2.13	1.65	1.60	1.33	1.37	1.54	1.55	1.96	
LAGOON DISCHARGE	120.56	58.21	70.72	123.92	45.73	63.83	51.21	49.47	39.77	42.55	46.13	48.15	63.35	
BOD5														
INFLUENT (MG/L)	87.0	80.0	82.0	111.0	115.0	74.0	153.0	102.0	204.0	124.0	89.0	306.0	127.3	
EFFLUENT (MG/L)	18.9	24.2	22.9	22.4	13.1	22.8	19.3	22.1	19.1	17.5	14.6	15.9	19.4	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	73.52	50.33	52.21	51.07	24.23	48.56	31.84	35.36	25.40	23.97	22.48	24.64	38.02	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	118.0	95.0	54.0	51.0	62.0	59.0	74.0	120.0	167.0	104.0	53.0	123.0	90.0	
EFFLUENT (MG/L)	9.3	10.4	8.6	10.3	16.2	28.6	50.9	30.7	36.7	39.6	23.3	20.1	23.7	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	36.17	21.63	19.60	23.48	29.97	60.91	83.98	49.12	48.81	54.25	35.88	31.15	46.45	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	4.9	5.2	4.0	3.9	4.2	4.2	4.4	4.7	10.4	6.6	4.5	7.0	5.3	
EFFLUENT (MG/L)	2.3	2.9	2.6	2.5	2.2	2.7	3.3	3.2	3.7	3.2	2.4	3.6	2.9	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	8.94	6.03	5.92	5.70	4.07	5.75	5.44	5.12	4.92	4.38	3.69	5.58	5.68	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	NA	NA

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES	START DATE	END DATE	ANTICIPATED COMPLIANCE
FACILITY EXPANSION/UPGRADING - ENGINEERING STUDY PHASE	1988	1992/12	
FACILITY EXPANSION/UPGRADING - CONSTRUCTION INITIATED	1988	1990/12	

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : WOODSTOCK
PLANT : WOODSTOCK WPCP
WORKS NUMBER : 120000685
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL-CONTINUOUS
:
DESIGN CAPACITY : 32.27 (1000 M3)

REGION : SOUTHWEST
DISTRICT : OXFORD
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : THAMES RIVER
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 27,000

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	19.17	17.47	18.52	20.99	19.44	19.96	16.91	16.82	16.23	16.80	19.28	19.13	18.39	
BOD5														
INFLUENT (MG/L)	84.0	91.0	93.0	96.0	100.0	98.0	123.0	156.0	129.0	133.0	104.0	116.0	110.3	
EFFLUENT (MG/L)	6.7	6.0	6.9	9.0	8.5	8.5	6.8	8.0	8.9	6.7	6.5	11.9	7.9	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	128.43	104.82	127.78	188.91	165.24	169.66	114.98	134.56	144.44	112.56	125.32	227.64	145.28	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	169.0	257.0	210.0	199.0	179.0	172.0	182.0	272.0	234.0	231.0	246.0	174.0	210.4	
EFFLUENT (MG/L)	6.9	7.1	8.6	9.3	8.8	5.7	6.5	8.8	5.3	7.2	7.4	6.6	7.4	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	132.27	124.03	159.27	195.20	171.07	113.77	109.91	148.01	86.01	120.96	142.67	126.25	136.09	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	4.6	5.0	5.9	6.1	5.8	4.6	6.5	4.4	7.3	7.2	6.4	5.8	5.8	
EFFLUENT (MG/L)	0.6	0.9	0.8	0.7	0.6	0.8	0.9	0.6	0.8	0.8	0.6	0.6	0.7	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	11.50	15.72	14.81	14.69	11.66	15.96	15.21	10.09	12.98	13.44	11.56	11.47	12.87	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES	START DATE	END DATE	ANTICIPATED COMPLIANCE
OPERATIONAL/PROCESS - PROCESS CONTROL BEING UPGRADED	1990/03	1990/04	1990/05

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : ZURICH
PLANT : ZURICH LAGOON
WORKS NUMBER : 110001444
TREATMENT : CONVENTIONAL LAGOON SEASONAL
:
:
DESIGN CAPACITY : 0.44 (1000 M3)

REGION : SOUTHWEST
DISTRICT : HURON
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : MUN DRAIN TO L. HURON
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 920

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.49	0.51	0.57	0.57	0.51	0.44	0.48	0.44	0.43	0.38	0.40	0.37	0.47	
LAGOON DISCHARGE	ND	ND	ND	ND	84.18	ND	ND	ND	ND	36.30	ND	ND	60.24	
BOD5														
INFLUENT (MG/L)	94.0	144.0	104.0	67.0	ND	111.0	100.0	197.0	162.0	143.0	117.0	107.0	122.4	
EFFLUENT (MG/L)	ND	ND	ND	ND	1.9	ND	ND	ND	ND	3.2	ND	ND	2.6	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	ND	0.96	ND	ND	ND	ND	1.21	ND	ND	1.22	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	111.0	221.0	163.0	76.0	ND	86.0	140.0	240.0	193.0	159.0	104.0	55.0	140.7	
EFFLUENT (MG/L)	ND	ND	ND	ND	13.8	ND	ND	ND	ND	14.1	ND	ND	14.0	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	ND	7.03	ND	ND	ND	ND	5.35	ND	ND	6.58	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.0	9.6	5.6	3.6	ND	4.6	7.3	9.3	8.3	9.3	4.8	4.9	6.7	
EFFLUENT (MG/L)	ND	ND	ND	ND	0.1	ND	ND	ND	ND	0.1	ND	ND	0.1	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	0.05	ND	ND	ND	ND	0.03	ND	ND	0.05	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	NA	NA

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES	START DATE	END DATE	ANTICIPATED COMPLIANCE
FACILITY EXPANSION/UPGRADING - ENGINEERING STUDY PHASE	1988/02	1990/01	

Ministry of the Environment
Ontario

West Central Region

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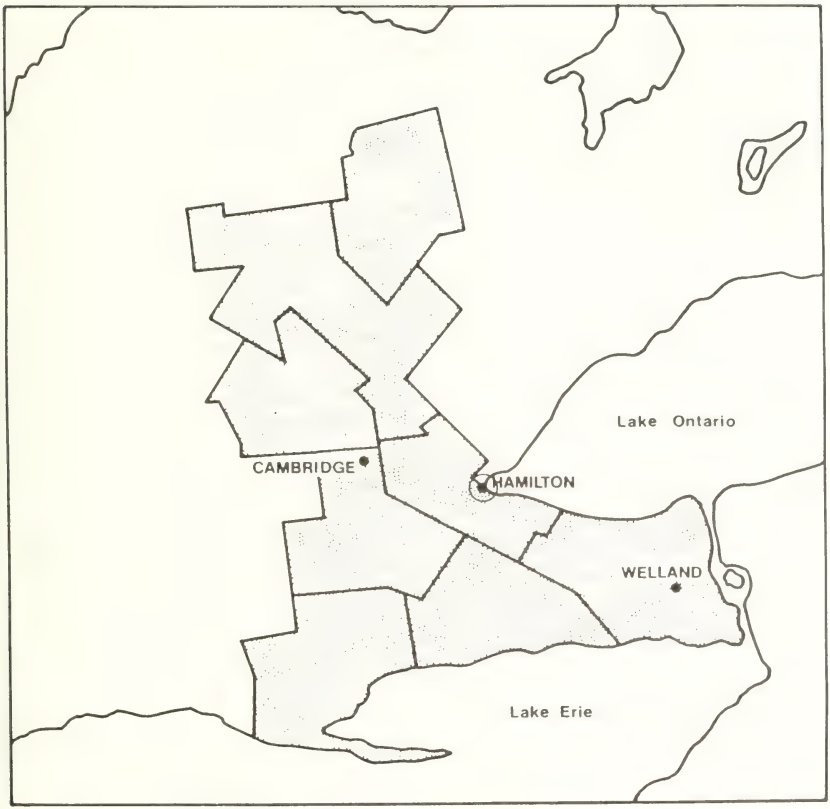

Ministry of the Environment
Ontario

West Central Region

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REGIONAL OFFICE

Hamilton
119 King St. West
P.O. Box 2112
L8N 3Z9
(416) 521-7640

DISTRICT OFFICES

Cambridge
400 Clyde Road
P.O. Box 219
N1R 5T8
(519) 653-1511

Haldimand-Norfolk/Brant
119 King St. West
P.O. Box 2112
L8N 3Z9
(416) 521-7732

Hamilton-Wentworth
119 King St. West
P.O. Box 2112
L8N 3Z9
(416) 521-7732

Welland
637 - 641 Niagara St. West
L3C 1L9
(416) 384-9896

WEST-CENTRAL SUMMARY - 1989

Treatment Type	Number			Design Capacity (1000M3/D)		
	Min	Mun	Tot	Ministry	Municipal	Total
Conventional Activated Sludge	13	10	23	386.21	1,063.15	1,449.36
Extended Aeration	6	2	8	11.72	6.95	18.67
High Rate	1	0	1	9.32	-	9.32
Oxidation Ditch	4	0	4	4.51	-	4.51
Communal Septic Tank	0	1	1	-	0.23	0.23
Aerated Lagoon	1	0	1	0.99	-	0.99
Convent. Lagoon Continuous	0	1	1	-	2.29	2.29
Conventional Lagoon Seasonal	5	2	7	4.02	1.73	5.75
Aerated Cell Plus Lagoon	2	2	4	4.86	4.98	9.84
Conventional Lagoon Annual	1	1	2	0.09	0.56	0.64
Rotat. Biological Contactor	0	1	1	-	58.19	58.19
TOTALS	34	20	54	421.72	1,138.08	1,559.80

1000M3/D: Thousands of cubic meters per day
ADF: Average Daily Flow

WEST-CENTRAL SUMMARY - 1989

Treatment Type	Number			Annual ADF (1000M3/D)		
	Min	Mun	Tot	Ministry	Municipal	Total
Conventional Activated Sludge	13	10	23	232.45	529.35	761.80
Extended Aeration	6	2	8	5.56	5.66	11.22
High Rate	1	0	1	5.43	0.00	5.43
Oxidation Ditch	4	0	4	3.16	0.00	3.16
Communal Septic Tank	0	1	1	0.00	0.00	0.00
Aerated Lagoon	1	0	1	1.49	0.00	1.49
Convent. Lagoon Continuous	0	1	1	0.00	0.67	0.67
Conventional Lagoon Seasonal	5	2	7	2.47	0.82	3.29
Aerated Cell Plus Lagoon	2	2	4	2.56	4.38	6.94
Conventional Lagoon Annual	1	1	2	0.00	0.25	0.25
Rotat. Biologcial Contactor	0	1	1	0.00	56.38	56.38
TOTALS	34	20	54	267.43	597.51	864.94

1000M3/D: Thousands of cubic meters per day
ADF: Average Daily Flow

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : ARTHUR
PLANT : ARTHUR LAGOON
WORKS NUMBER : 110000882
TREATMENT : CONVENTIONAL LAGOON SEASONAL
: PHOSPHORUS REMOVAL - BATCH
:
DESIGN CAPACITY : 0.98 (1000 M3)

REGION : WEST CENTRAL
DISTRICT : WELLINGTON
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : CONESTOGA RIVER
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 1,736

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.14	1.07	1.24	1.49	1.30	1.40	0.92	0.93	0.96	1.07	1.42	0.95	1.16	
LAGOON DISCHARGE	ND	ND	ND	165.64	ND	ND	ND	ND	ND	157.41	ND	ND	161.53	
BOD5														
INFLUENT (MG/L)	122.0	76.0	68.0	148.0	142.0	92.0	141.0	158.0	212.0	118.0	ND	48.0	120.5	
EFFLUENT (MG/L)	ND	ND	ND	25.1	ND	ND	ND	ND	ND	5.2	ND	ND	15.2	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	37.39	ND	ND	ND	ND	ND	5.56	ND	ND	17.63	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	100.0	294.0	61.0	113.0	109.0	109.0	154.0	228.0	125.0	96.0	ND	204.0	144.8	
EFFLUENT (MG/L)	ND	ND	ND	13.1	ND	ND	ND	ND	ND	10.4	ND	ND	11.8	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	19.51	ND	ND	ND	ND	ND	11.12	ND	ND	13.69	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	5.5	6.9	3.0	4.4	5.9	4.6	6.3	7.3	6.4	5.1	ND	7.5	5.7	
EFFLUENT (MG/L)	ND	ND	ND	0.2	ND	ND	ND	ND	ND	0.3	ND	ND	0.3	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	0.29	ND	ND	ND	ND	ND	0.32	ND	ND	0.35	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NO REMEDIAL MEASURES REPORTED

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : BRANTFORD
PLANT : [illegible] WATER (DISCHARGE TO A TILE FIELD)
[illegible] NUMBER : [illegible]
PROBLEM : [illegible] SEPTIC TANK

[illegible] : [illegible] (M3)

REGION : WEST CENTRAL
DISTRICT : BRANT
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : NO DISC.TO SURFACE WATER
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 65

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. [illegible] FLOW (M3)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BOD														
INFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
PERCENT REMOVAL													0	
PERCENT REMOVAL LIMITS													30	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
PERCENT REMOVAL													0	
PERCENT REMOVAL LIMITS													50	
TOTAL [illegible]														
INFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	3%	NO DISCHARGE
SS	3%	NO DISCHARGE
TP	NA	NO DISCHARGE

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : BRANTFORD
PLANT : BRANTFORD WPCP
WORKS NUMBER : 110000043
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL-CONTINUOUS
:
DESIGN CAPACITY : 81.81 (1000 M3)

REGION : WEST CENTRAL
DISTRICT : BRANT
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : GRAND RIVER
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 73,000

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	49.80	48.62	49.63	52.63	51.18	51.82	49.44	47.34	48.75	49.42	50.77	45.41	49.57	
BOD5														
INFLUENT (MG/L)	220.0	220.0	267.0	231.0	210.0	219.0	166.0	230.0	234.0	343.0	232.0	191.0	230.3	
EFFLUENT (MG/L)	11.1	11.3	11.6	9.3	11.1	13.8	7.5	10.8	15.3	16.4	17.5	9.4	12.1	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	552.78	549.40	575.70	489.45	568.09	715.11	370.80	511.27	745.87	810.48	888.47	426.85	599.80	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	237.0	260.0	259.0	239.0	214.0	164.0	237.0	249.0	280.0	327.0	256.0	213.0	244.6	
EFFLUENT (MG/L)	9.7	8.5	8.4	7.8	8.9	10.0	4.5	7.9	7.9	13.0	16.1	11.0	9.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	483.06	413.27	416.89	410.51	455.50	518.20	222.48	373.98	385.12	642.46	817.39	499.51	470.92	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.3	5.9	6.1	5.6	6.8	6.3	8.4	8.2	9.8	7.8	7.7	4.8	7.0	
EFFLUENT (MG/L)	0.8	0.7	0.7	0.7	1.0	1.2*	1.0	0.9	1.0	1.0	1.0	0.8	0.9	1
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	39.84	34.03	34.74	36.84	51.18	62.18	49.44	42.60	48.75	49.42	50.77	36.32	44.61	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	NO

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES

	START DATE	END DATE	ANTICIPATED COMPLIANCE
FACILITY EXPANSION/UPGRADING - REMEDIAL MEASURES BEING IMPLEMENTED IN PHASES			1990/01

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : BRANTFORD
PLANT : CAINSVILLE LAGOON (SERVES INDUSTRY)
WORKS NUMBER : 1200004/16
TREATMENT : CONVENTIONAL LAGOON SEASONAL
: PHOSPHORUS REMOVAL CONTINUOUS
:
DESIGN CAPACITY : 0.16 (1000 M3)

REGION : WEST CENTRAL
DISTRICT : BRANT
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : FAIRCHILD CREEK
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 65

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
LAGOON DISCHARGE	ND	ND	ND	35.90	ND	ND	ND	ND	ND	ND	ND	ND	35.90	
BOD5														
INFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
EFFLUENT (MG/L)	ND	ND	ND	13.5	ND	ND	ND	ND	ND	ND	ND	ND	13.5	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
SUSPENDED SOLIDS														
INFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
EFFLUENT (MG/L)	ND	ND	ND	19.1	ND	ND	ND	ND	ND	ND	ND	ND	19.1	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
EFFLUENT (MG/L)	ND	ND	ND	0.7	ND	ND	ND	ND	ND	ND	ND	ND	0.7	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	1.0 MG/L	YES

NO REMEDIAL MEASURES REPORTED

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : CAMBRIDGE
PLANT : GALT WPCP
WORKS NUMBER : 110000276
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL-CONTINUOUS
:
DESIGN CAPACITY : 38.64 (1000 M3)

REGION : WEST CENTRAL
DISTRICT :
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : GRAND RIVER
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 50,143

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	32.55	32.21	33.25	33.64	32.06	33.28	30.23	32.30	31.04	31.46	32.16	29.54	31.98	
BOD5														
INFLUENT (MG/L)	153.0	172.0	165.0	188.0	162.0	185.0	169.0	166.0	160.0	156.0	156.0	151.0	165.3	
EFFLUENT (MG/L)	17.0	14.2	13.4	12.3	14.2	11.5	9.1	9.1	7.4	8.5	9.6	11.2	11.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	553.35	457.38	445.55	413.77	455.25	382.72	275.09	293.93	229.69	267.41	308.73	330.84	367.77	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	154.0	206.0	182.0	213.0	197.0	193.0	181.0	165.0	162.0	158.0	158.0	159.0	177.3	
EFFLUENT (MG/L)	23.7	22.5	23.2	21.8	16.2	16.1	11.1	11.5	11.4	13.0	15.4	16.2	16.8	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	771.43	724.72	771.40	733.35	519.37	535.80	335.55	371.45	353.85	408.98	495.26	478.54	537.26	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	5.6	6.1	5.7	6.3	5.5	6.4	5.1	5.4	6.1	6.4	6.1	5.1	5.8	
EFFLUENT (MG/L)	0.8	0.8	0.8	0.8	0.7	0.8	0.4	0.6	0.7	0.6	0.6	0.7	0.7	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	26.04	25.76	26.60	26.91	22.44	26.62	12.09	19.38	21.72	18.87	19.29	20.67	22.39	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NO REMEDIAL MEASURES REPORTED

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : CAMBRIDGE
PLANT : HESPELER WPCP
WORKS NUMBER : 110001036
TREATMENT : HIGH RATE
: PHOSPHORUS REMOVAL CONTINUOUS
:
DESIGN CAPACITY : 9.31 (1000 M3)

REGION : WEST CENTRAL
DISTRICT :
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : SPEED RIVER
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 11,392

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	5.41	5.35	5.67	5.39	5.20	5.51	4.78	4.85	5.29	5.84	6.35	5.52	5.43	
BOD5														
INFLUENT (MG/L)	160.0	136.0	138.0	130.0	124.0	127.0	128.0	159.0	152.0	126.0	142.0	622.0	178.7	
EFFLUENT (MG/L)	67.0	ND	31.0	24.6	18.8	11.3	15.4	10.2	23.1	13.8	29.9	25.8	24.6	--
CONCENTRATION LIMIT (MG/L)													25.0	--
LOADING (KG/D)	362.47	ND	175.77	132.59	97.76	62.26	73.61	49.47	122.19	80.59	189.86	142.41	133.58	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	178.0	225.0	230.0	208.0	247.0	241.0	264.0	230.0	261.0	249.0	234.0	274.0	236.8	
EFFLUENT (MG/L)	45.9	44.4	42.8	40.6	36.4	39.5	27.4	25.8	30.6	40.9	44.4	44.9	38.6*	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	248.31	237.54	242.67	218.83	189.28	217.64	130.97	125.13	161.87	238.85	281.94	247.84	209.60	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	5.7	6.4	5.9	5.6	6.5	5.9	5.8	5.7	6.8	7.1	6.2	6.9	6.2	
EFFLUENT (MG/L)	1.3*	1.7*	1.0	0.8	1.0	1.0	1.4*	1.0	1.1*	1.1*	1.5*	1.4*	1.2	7
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	7.03	9.09	5.67	4.31	5.20	5.51	6.69	4.85	5.81	6.42	9.52	7.72	6.52	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	NO
TP	1.0 MG/L	NO

NOTE :
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES	START DATE	END DATE	ANTICIPATED COMPLIANCE
FACILITY EXPANSION/UPGRADING - PRELIMINARY DESIGN PHASE	1989/01	1989/12	

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : CAMBRIDGE
PLANT : PRESTON WPCP
WORKS NUMBER : 110000622
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL-CONTINUOUS
:
DESIGN CAPACITY : 16.86 (1000 M3)

REGION : WEST CENTRAL
DISTRICT :
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : GRAND RIVER
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 18,727

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	9.34	9.32	9.76	9.89	10.10	10.00	9.00	9.60	9.00	9.12	10.12	8.79	9.50	
BOD5														
INFLUENT (MG/L)	516.0	490.0	481.0	391.0	676.0	415.0	438.0	519.0	457.0	290.0	278.0	492.0	453.6	
EFFLUENT (MG/L)	13.9	11.7	14.4	9.3	13.3	9.6	5.2	8.1	9.3	9.5	7.1	7.9	9.9	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	129.82	109.04	140.54	91.97	134.33	96.00	46.80	77.76	83.70	86.64	71.85	69.44	94.05	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	360.0	578.0	449.0	507.0	577.0	476.0	560.0	642.0	538.0	386.0	379.0	393.0	487.1	
EFFLUENT (MG/L)	11.3	9.4	10.2	8.6	10.5	8.2	5.5	6.8	9.6	7.7	8.5	11.0	8.9	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	105.54	87.60	99.55	85.05	106.05	82.00	49.50	65.28	86.40	70.22	86.02	96.69	84.55	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.9	6.1	4.9	4.3	8.3	7.0	7.5	6.8	7.4	6.2	5.5	3.9	6.2	
EFFLUENT (MG/L)	0.8	0.5	0.6	0.4	1.4*	1.2*	1.3*	0.8	0.7	0.4	0.3	0.3	0.7	3
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	7.47	4.66	5.85	3.95	14.14	12.00	11.70	7.68	6.30	3.64	3.03	2.63	6.65	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	NO

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES

	START DATE	END DATE	ANTICIPATED COMPLIANCE
OPERATIONAL/PROCESS - SAMPLING PROGRAM BEING MODIFIED	1989/06	1989/08	

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : DELHI
PLANT : DELHI WPCP
WORKS NUMBER : 120001425
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHOROUS REMOVAL CONTINUOUS
: AERABLE SINGLE STAGE
DESIGN CAPACITY : 3.18 (1000 M3)

REGION : WEST CENTRAL
DISTRICT : HALDIMAN-NORFOLK, REG. MUN.
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : BIG CREEK
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 4,257

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	2.41	2.32	2.24	2.10	2.14	1.97	1.80	1.76	1.76	2.41	2.54	2.36	2.15	
BOD5														
INFLUENT (MG/L)	169.0	148.0	142.0	169.0	142.0	120.0	157.0	118.0	145.0	168.0	138.0	147.0	146.9	
EFFLUENT (MG/L)	12.6	5.6	2.6	3.6	10.9	8.4	13.9	22.3	25.4	6.5	8.0	18.9	11.6	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	30.36	12.99	5.82	7.56	23.32	16.54	25.02	39.24	44.70	15.66	20.32	44.60	24.94	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	137.0	173.0	172.0	152.0	169.0	150.0	195.0	142.0	181.0	174.0	152.0	168.0	163.8	
EFFLUENT (MG/L)	9.8	6.8	5.5	13.2	11.5	6.6	4.8	6.8	7.5	4.6	6.0	9.7	7.7	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	23.61	15.77	12.32	27.72	24.61	13.00	8.64	11.96	13.20	11.08	15.24	22.89	16.56	--
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.0	6.2	7.1	5.7	7.7	5.3	7.1	5.7	6.5	7.4	3.4	5.7	6.2	
EFFLUENT (MG/L)	0.3	0.2	0.2	0.3	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.3	0.2	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	0.72	0.46	0.44	0.63	0.42	0.19	0.18	0.35	0.35	0.48	0.50	0.70	0.43	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NO REMEDIAL MEASURES REPORTED

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP ASSESSED MONTHLY
* EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : DRAYTON
PLANT : DRAYTON LAGOON (MUN OP JAN 1 1989)
WORKS NUMBER : 120001782
TREATMENT : CONVENTIONAL LAGOON ANNUAL
: PHOSPHORUS REMOVAL-CONTINUOUS
:
DESIGN CAPACITY : 0.55 (1000 M3)

REGION : WEST CENTRAL
DISTRICT : WELLINGTON
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : CONESTOGO RIVER
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES
POPULATION SERVED :

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	ND	0.24	0.25	0.26	0.23	0.24	0.23	0.22	0.24	0.28	0.31	0.25	0.25	
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	68.94	68.94	
BOD5														
INFLUENT (MG/L)	ND	ND	188.0	105.0	ND	190.0	207.0	ND	ND	222.0	ND	ND	182.4	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.0	3.0	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.75	0.75	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	ND	ND	198.0	122.0	ND	106.0	148.0	ND	ND	396.0	ND	ND	194.0	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.5	3.5	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.87	0.88	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.9	ND	ND	7.9	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.1	0.1	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.02	0.03	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	1.0 MG/L	YES

NO REMEDIAL MEASURES REPORTED

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : DUNDAS
PLANT : DUNDAS KING ST.WPCP
WORKS NUMBER : 120001372
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL-CONTINUOUS
: EFFLUENT POLISHING
DESIGN CAPACITY : 18.18 (1000 M3)

REGION : WEST CENTRAL
DISTRICT : HAMILTON-WENTWORTH, REG. MUN.
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : COOTES PARADISE
MINOR BASIN : ONTARIO
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 19,501

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	11.23	10.20	11.08	11.89	10.77	12.37	10.78	ND	8.59	9.31	9.91	ND	10.61	
BOD5														
INFLUENT (MG/L)	111.0	128.0	119.0	112.0	121.0	105.0	124.0	105.0	121.0	115.0	86.0	ND	113.4	
EFFLUENT (MG/L)	1.1	1.2	2.0	1.2	2.0	0.6	1.0	0.9	1.3	1.4	1.6	ND	1.3	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	12.35	12.24	22.16	14.26	21.54	7.42	10.78	ND	11.16	13.03	15.85	ND	13.79	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	153.0	182.0	168.0	161.0	176.0	151.0	204.0	138.0	180.0	210.0	145.0	ND	169.8	
EFFLUENT (MG/L)	1.1	1.4	1.0	1.3	1.6	1.0	7.0	2.0	1.5	4.9	2.1	ND	2.3	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	12.35	14.28	11.08	15.45	17.23	12.37	75.46	ND	12.88	45.61	20.81	ND	24.40	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	4.6	5.3	4.6	4.0	4.1	3.8	4.6	4.6	3.6	5.3	4.1	ND	4.4	
EFFLUENT (MG/L)	0.2	0.2	0.3	0.1	0.3	0.1	1.0	0.8	0.2	0.3	0.4	ND	0.4	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	2.24	2.04	3.32	1.18	3.23	1.23	10.78	ND	1.71	2.79	3.96	ND	4.24	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NO REMEDIAL MEASURES REPORTED

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : DUNNVILLE
PLANT : DUNNVILLE WPCP
WORKS NUMBER : 120001443
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL-CONTINUOUS
:
DESIGN CAPACITY : 7.72 (1000 M3)

REGION : WEST CENTRAL
DISTRICT : HALDIMAN-NORFOLK, REG. MUN.
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : GRAND RIVER
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 5,182

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	4.20	3.80	4.40	5.17	5.43	4.78	3.46	4.08	3.69	3.51	5.10	3.80	4.29	
BOD5														
INFLUENT (MG/L)	90.0	67.0	43.0	171.0	87.0	ND	106.0	175.0	144.0	175.0	258.0	127.0	131.2	
EFFLUENT (MG/L)	6.0	14.7	6.0	9.8	4.9	ND	4.2	4.8	6.2	5.0	9.5	5.9	7.0	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	25.20	55.86	26.40	50.66	26.60	ND	14.53	19.58	22.87	17.55	48.45	22.42	30.03	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	122.0	126.0	121.0	157.0	111.0	120.0	94.0	99.0	97.0	92.0	111.0	130.0	115.0	
EFFLUENT (MG/L)	13.9	27.4	8.0	12.3	12.6	14.5	6.3	7.9	7.2	6.2	6.8	8.8	11.0	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	58.38	104.12	35.20	63.59	68.41	69.31	21.79	32.23	26.56	21.76	34.68	33.44	47.19	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	5.0	4.7	5.0	4.6	4.4	3.8	4.5	5.1	4.6	4.6	7.0	4.8	4.8	
EFFLUENT (MG/L)	0.8	ND	0.7	0.5	0.6	2.6*	0.4	0.6	0.6	0.9	0.5	0.5	0.8	1
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	3.36	ND	3.08	2.58	3.25	12.42	1.38	2.44	2.21	3.15	2.55	1.90	3.43	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	NO

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES	START DATE	END DATE	ANTICIPATED COMPLIANCE
EQUIPMENT/MAINTENANCE - NEW EQUIPMENT BEING INSTALLED	1989/06	1989/06	1989/06

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : DUNNVILLE
PLANT : OSWEGO PARK LAGOON
WORKS NUMBER : 110003068
TREATMENT : CONVENTIONAL LAGOON ANNUAL
:
:
DESIGN CAPACITY : 0.04 (1000 M3)

REGION : WEST CENTRAL
DISTRICT : HALDIMAN-NORFOLK, REG. MUN.
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : OSWEGO CREEK
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 232

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BOD5														
INFLUENT (MG/L)	ND	229.0	ND	466.0	193.0	ND	ND	266.0	272.0	ND	148.0	205.0	254.1	
EFFLUENT (MG/L)	ND	ND	ND	ND	9.2	ND	ND	ND	ND	ND	ND	ND	9.2	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
SUSPENDED SOLIDS														
INFLUENT (MG/L)	270.0	90.0	ND	362.0	266.0	ND	ND	160.0	ND	ND	174.0	306.0	232.6	
EFFLUENT (MG/L)	ND	ND	ND	ND	9.2	ND	ND	ND	ND	ND	ND	ND	9.2	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	ND	ND	ND	11.6	ND	ND	ND	ND	ND	ND	11.6	ND	11.6	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	NA	NA

NO REMEDIAL MEASURES REPORTED

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : ELORA
PLANT : ELORA WPCP
WORKS NUMBER : 110000178
TREATMENT : EXTENDED AERATION
: PHOSPHORUS REMOVAL-CONTINUOUS
:
DESIGN CAPACITY : 3.06 (1000 M3)

REGION : WEST CENTRAL
DISTRICT : WELLINGTON
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : GRAND RIVER
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 3,129

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.35	1.32	1.39	1.50	1.43	1.50	1.42	1.29	1.35	1.16	1.48	1.46	1.39	
BOD5														
INFLUENT (MG/L)	114.0	136.0	127.0	117.0	124.0	110.0	152.0	157.0	150.0	148.0	179.0	150.0	138.7	
EFFLUENT (MG/L)	3.3	3.2	1.3	2.2	5.0	2.1	0.6	0.7	0.4	0.7	3.2	4.8	2.3	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	4.45	4.22	1.80	3.30	7.15	3.15	0.85	0.90	0.54	0.81	4.73	7.00	3.20	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	158.0	198.0	163.0	143.0	158.0	120.0	178.0	172.0	180.0	142.0	143.0	144.0	158.3	
EFFLUENT (MG/L)	8.9	8.7	7.6	8.8	10.0	6.8	4.4	5.1	5.5	4.4	5.3	7.7	6.9	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	12.01	11.48	10.56	13.20	14.30	10.20	6.24	6.57	7.42	5.10	7.84	11.24	9.59	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.9	6.6	7.1	5.5	6.6	3.4	6.9	6.7	7.8	7.5	6.8	6.7	6.5	
EFFLUENT (MG/L)	0.3	0.3	0.3	0.3	0.5	0.8	0.1	0.1	0.1	0.2	0.7	1.7*	0.5	1
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	0.40	0.39	0.41	0.45	0.71	1.20	0.14	0.12	0.13	0.23	1.03	2.48	0.70	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	NO

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES	START DATE	END DATE	ANTICIPATED COMPLIANCE
EQUIPMENT/MAINTENANCE - MAINTENANCE PROCEDURES BEING UPGRADED	1989/12	1990/01	1990/01

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : FERGUS
PLANT : FERGUS WPCP
WORKS NUMBER : 110000249
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHOROUS REMOVAL CONTINUOUS
:
DESIGN CAPACITY : 5.00 (1000 M3)

REGION : WEST CENTRAL
DISTRICT : WELLINGTON
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : GRAND RIVER
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 6,050

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	4.07	3.75	4.58	5.10	4.34	4.96	3.52	3.53	3.47	3.47	4.89	4.47	4.18	
BOD5														
INFLUENT (MG/L)	75.0	130.0	119.0	78.0	117.0	97.0	110.0	146.0	122.0	219.0	112.0	115.0	120.0	
EFFLUENT (MG/L)	7.1	15.1	20.8	5.3	9.6	19.8	9.8	8.9	10.5	13.7	10.4	11.1	11.8	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	28.89	56.62	95.26	27.03	41.66	98.20	34.49	31.41	36.43	47.53	50.85	49.61	49.32	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	166.0	179.0	158.0	143.0	204.0	183.0	415.0	323.0	183.0	237.0	297.0	164.0	221.0	
EFFLUENT (MG/L)	27.5	29.4	38.0	29.0	25.7	19.7	20.4	22.1	23.0	23.8	25.6	26.4	25.9*	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	111.92	110.25	174.04	147.90	111.53	97.71	71.80	78.01	79.81	82.58	125.18	118.00	108.26	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	4.5	5.8	3.4	3.4	6.0	3.1	4.6	5.8	6.2	7.5	4.3	1.9	4.7	
EFFLUENT (MG/L)	0.4	0.5	0.6	0.3	0.5	0.6	0.5	0.5	0.5	0.4	0.5	0.5	0.5	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	1.62	1.87	2.74	1.53	2.17	2.97	1.76	1.76	1.73	1.38	2.44	2.23	2.09	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	NO
TP	1.0 MG/L	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (E.G. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES	START DATE	END DATE	ANTICIPATED COMPLIANCE
COLLECTION SYSTEM - ENFORCING SEWER-USE BYLAWS	1989/06	1990/04	

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : FLAMBOROUGH
PLANT : WATERDOWN WPCP
WORKS NUMBER : 120005001
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL-CONTINUOUS
: EFFLUENT POLISHING
DESIGN CAPACITY : 2.72 (1000 M3)

REGION : WEST CENTRAL
DISTRICT : HAMILTON-WENTWORTH, REG. MUN.
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : GRINDSTONE CREEK
MINOR BASIN : ONTARIO
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 3,900

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	2.44	1.95	1.75	2.02	2.29	2.38	2.01	2.15	2.50	2.32	2.16	2.08	2.17	
BOD5														
INFLUENT (MG/L)	125.0	126.0	125.0	113.0	133.0	111.0	112.0	125.0	118.0	117.0	81.0	ND	116.9	
EFFLUENT (MG/L)	1.6	1.1	2.0	2.3	3.0	1.1	2.0	0.8	1.0	0.7	2.3	ND	1.6	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	3.90	2.14	3.50	4.64	6.87	2.61	4.02	1.72	2.50	1.62	4.96	ND	3.47	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	150.0	161.0	145.0	269.0	165.0	158.0	154.0	147.0	171.0	134.0	116.0	ND	160.9	
EFFLUENT (MG/L)	2.3	1.0	2.3	1.7	3.0	1.6	1.0	2.2	2.0	3.7	5.5	ND	2.4	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	5.61	1.95	4.02	3.43	6.87	3.80	2.01	4.73	5.00	8.58	11.88	ND	5.21	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	5.1	5.1	4.7	4.6	3.9	4.1	4.7	5.3	5.0	4.6	4.2	ND	4.7	
EFFLUENT (MG/L)	0.3	0.3	0.9	0.6	0.7	0.2	0.4	0.4	0.2	0.4	0.4	ND	0.4	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	0.73	0.58	1.57	1.21	1.60	0.47	0.80	0.86	0.50	0.92	0.86	ND	0.87	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NO REMEDIAL MEASURES REPORTED

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : FORT ERIE
PLANT : ANGER AVE. WPCP
WORKS NUMBER : 120001292
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHOROUS REMOVAL-CONTINUOUS (1990)
:
DESIGN CAPACITY : 16.36 (1000 M3)

REGION : WEST CENTRAL
DISTRICT : NIAGARA, REG. MUN.
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : NIAGARA RIVER
MINOR BASIN : ONTARIO
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 13,765

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	8.94	8.75	13.14	9.88	15.28	13.13	8.66	9.72	9.98	8.88	13.44	8.42	10.69	
BOD5														
INFLUENT (MG/L)	120.0	90.0	73.0	22.0	66.0	41.0	189.0	150.0	70.0	133.0	61.0	101.0	93.0	
EFFLUENT (MG/L)	25.1	50.9	21.2	10.0	28.9	34.9	44.1	52.2	49.8	50.8	19.0	16.4	33.6*	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	224.39	445.37	278.56	98.80	441.59	458.23	381.90	507.38	497.00	451.10	255.36	138.08	359.18	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	90.0	94.0	74.0	67.0	82.0	69.0	78.0	100.0	105.0	99.0	87.0	106.0	87.6	
EFFLUENT (MG/L)	27.2	34.7	26.1	29.8	25.9	27.3	33.2	37.4	39.7	37.6	10.4	15.5	28.7*	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	243.16	303.62	342.95	294.42	395.75	358.44	287.51	363.52	396.20	333.88	139.77	130.51	306.80	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	2.9	3.4	2.7	2.5	2.5	2.3	3.3	3.0	3.8	3.6	2.2	3.2	3.0	
EFFLUENT (MG/L)	0.7	0.8	0.6	0.7	1.1*	0.4	0.8	1.0	0.8	1.1*	0.4	0.3	0.7	2
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	6.25	7.00	7.88	6.91	16.80	5.25	6.92	9.72	7.98	9.76	5.37	2.52	7.48	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	NO
SS	25.0 MG/L	NO
TP	1.0 MG/L	NO

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES

	START DATE	END DATE	ANTICIPAITED COMPLIANCE
COLLECTION SYSTEM - INFILTRATION PROBLEMS BEING CORRECTED	1989	1990/02	1990
SLUDGE DISPOSAL/REMOVAL - UPGRADING SLUDGE THICKENING FACILITIES			
SLUDGE DISPOSAL/REMOVAL - UPGRADING DIGESTOR			
FACILITY EXPANSION/UPGRADING - UPGRADING TO SECONDARY TREATMENT			

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : FORT ERIE
PLANT : CRYSTAL BEACH WPCP
WORKS NUMBER : 120001283
TREATMENT : EXTENDED AERATION
: PHOSPHORUS REMOVAL-CONTINUOUS
:
DESIGN CAPACITY : 3.88 (1000 M3)

REGION : WEST CENTRAL
DISTRICT : NIAGARA, REG. MUN.
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : LAKE ERIE
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 4,095

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	3.80	3.40	4.60	5.10	6.30	7.20	3.90	3.50	3.28	3.00	3.70	3.23	4.25	
BOD5														
INFLUENT (MG/L)	52.0	85.0	49.0	73.0	74.0	23.0	65.0	71.0	44.0	43.0	55.0	65.0	58.3	
EFFLUENT (MG/L)	7.7	17.1	14.0	13.3	9.6	8.4	29.2	12.5	22.6	17.9	6.9	15.0	14.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	29.26	58.14	64.40	67.83	60.48	60.48	113.88	43.75	74.12	53.70	25.53	48.45	61.63	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	79.0	102.0	54.0	96.0	61.0	63.0	108.0	77.0	58.0	63.0	61.0	64.0	73.8	
EFFLUENT (MG/L)	12.6	17.6	12.4	13.6	12.7	14.8	25.5	17.6	24.7	17.7	14.5	15.6	16.6	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	47.88	59.84	57.04	69.36	80.01	106.56	99.45	61.60	81.01	53.10	53.65	50.38	70.55	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	3.2	3.5	3.0	2.8	4.3	2.5	4.1	3.3	2.6	2.8	2.3	2.8	3.1	
EFFLUENT (MG/L)	0.5	1.1*	0.7	0.4	0.3	0.6	1.2*	0.9	1.3*	1.0	0.5	0.5	0.8	3
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	1.90	3.74	3.22	2.04	1.89	4.32	4.68	3.15	4.26	3.00	1.85	1.61	3.40	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	NO

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES

	START DATE	END DATE	ANTICIPATED COMPLIANCE
COLLECTION SYSTEM - INFILTRATION PROBLEMS BEING CORRECTED	1990/09	1991	
SLUDGE DISPOSAL/REMOVAL - UPGRADING SLUDGE THICKENING FACILITIES	1990	1991	
FACILITY EXPANSION/UPGRADING - UPGRADING TO SECONDARY TREATMENT	1990	1991	
FACILITY EXPANSION/UPGRADING - UPGRADING SECONDARY CLARIFIERS	1990	1991	
FACILITY EXPANSION/UPGRADING - UPGRADING PRIMARY CLARIFIERS	1990	1991	
FACILITY EXPANSION/UPGRADING - UPGRADING DISINFECTION PROCESS	1990	1991	

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : FORT ERIE
PLANT : STEVENSVILLE DOUGLASTOWN LAGOON
WORKS NUMBER : 120003110
TREATMENT : CONVENTIONAL LAGOON CONTINUOUS
:
:
DESIGN CAPACITY : 2.29 (1000 M3)

REGION : WEST CENTRAL
DISTRICT : NIAGARA, REG. MUN.
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : NIAGARA RIVER
MINOR BASIN : ONTARIO
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 1,500

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.65	0.59	0.78	0.76	0.73	0.72	0.53	0.54	0.63	0.63	0.86	0.63	0.67	
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BOD5														
INFLUENT (MG/L)	325.0	112.0	35.0	93.0	34.0	48.0	111.0	89.0	112.0	56.0	34.0	104.0	96.1	
EFFLUENT (MG/L)	6.9	10.9	11.5	6.0	12.8	2.4	5.7	10.6	6.6	9.1	6.1	8.6	8.1	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	4.48	6.43	8.97	4.56	9.34	1.72	3.02	5.72	4.15	5.73	5.24	5.41	5.43	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	490.0	147.0	113.0	162.0	47.0	52.0	108.0	126.0	99.0	68.0	34.0	82.0	127.3	
EFFLUENT (MG/L)	9.4	24.0	50.0	14.8	19.8	8.1	14.5	50.0	46.0	6.0	4.3	12.9	21.7	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	6.11	14.16	39.00	11.24	14.45	5.83	7.68	27.00	28.98	3.78	3.69	8.12	14.54	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	5.5	ND	ND	ND	2.5	3.7	5.7	5.0	6.3	3.8	3.3	6.4	4.7	
EFFLUENT (MG/L)	2.5	ND	ND	ND	3.7	2.2	1.4	1.5	1.5	1.9	1.9	2.7	2.1	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	1.62	ND	ND	ND	2.70	1.58	0.74	0.81	0.94	1.19	1.63	1.70	1.41	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	NA	NA

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : GRAND VALLEY
PLANT : GRAND VALLEY WPCP
WORKS NUMBER : 110000301
TREATMENT : OXIDATION DITCH
: PHOSPHORUS REMOVAL-CONTINUOUS
:
DESIGN CAPACITY : 0.60 (1000 M3)

REGION : WEST CENTRAL
DISTRICT : DUFFERIN
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : GRAND RIVER
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 1,060

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.42	0.37	0.51	0.59	0.41	0.45	0.31	0.33	0.32	0.34	0.51	0.35	0.41	
BOD5														
INFLUENT (MG/L)	214.0	177.0	136.0	168.0	132.0	93.0	125.0	147.0	225.0	240.0	220.0	229.0	175.5	
EFFLUENT (MG/L)	5.9	8.5	4.3	5.4	4.4	3.3	1.4	2.2	2.1	2.1	9.4	9.3	4.9	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	2.47	3.14	2.19	3.18	1.80	1.48	0.43	0.72	0.67	0.71	4.79	3.25	2.01	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	98.0	153.0	97.0	100.0	131.0	116.0	219.0	176.0	148.0	178.0	155.0	186.0	146.4	
EFFLUENT (MG/L)	11.7	21.7	18.4	16.6	12.4	9.6	8.6	7.3	7.8	10.7	16.4	18.5	13.3	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	4.91	8.02	9.38	9.79	5.08	4.32	2.66	2.40	2.49	3.63	8.36	6.47	5.45	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	4.8	6.5	4.4	5.3	6.2	6.0	7.4	6.7	7.6	9.0	6.5	7.9	6.5	
EFFLUENT (MG/L)	0.5	0.8	0.6	0.6	0.6	0.5	0.4	0.5	0.5	0.4	0.4	0.6	0.5	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	0.21	0.29	0.30	0.35	0.24	0.22	0.12	0.16	0.16	0.13	0.20	0.21	0.21	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NO REMEDIAL MEASURES REPORTED

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : GRIMSBY
PLANT : BAKER ROAD WPCP
WORKS NUMBER : 120001684
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL CONTINUOUS
:
DESIGN CAPACITY : 18.18 (1000 M3)

REGION : WEST CENTRAL
DISTRICT : NIAGARA, REG. MUN.
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : LAKE ONTARIO
MINOR BASIN : ONTARIO
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 19,850

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	12.26	11.24	14.46	15.76	17.97	14.86	11.65	10.56	11.82	11.72	14.41	11.46	13.18	
BOD5														
INFLUENT (MG/L)	137.0	157.0	131.0	106.0	131.0	168.0	216.0	178.0	206.0	170.0	166.0	187.0	162.8	
EFFLUENT (MG/L)	25.6	26.1	38.2	31.7	15.8	19.3	23.8	9.5	11.6	12.5	21.2	30.3	22.1	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	313.85	293.36	552.37	499.59	283.92	286.79	277.27	100.32	137.11	146.50	305.49	347.23	291.28	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	184.0	210.0	177.0	162.0	158.0	185.0	201.0	201.0	201.0	183.0	183.0	193.0	186.5	
EFFLUENT (MG/L)	6.5	9.2	7.2	4.7	9.8	8.9	7.7	6.2	5.3	8.5	9.9	5.7	7.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	79.69	103.40	104.11	74.07	176.10	132.25	89.70	65.47	62.64	99.62	142.65	65.32	98.85	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	7.5	6.7	4.8	4.4	4.6	6.3	7.4	7.6	5.9	6.4	7.2	7.3	6.3	
EFFLUENT (MG/L)	0.2	0.5	0.2	0.2	0.5	0.4	0.4	0.3	0.2	0.4	1.0	0.4	0.4	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	2.45	5.62	2.89	3.15	8.98	5.94	4.66	3.16	2.36	4.68	14.41	4.58	5.27	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : GRIMSBY
PLANT : BIGGAR LAGOON
WORKS NUMBER : 120001256
TREATMENT : AERATED CELL PLUS LAGOON
: CONTINUOUS DISCHARGE
:
DESIGN CAPACITY : 1.13 (1000 M3)

REGION : WEST CENTRAL
DISTRICT : NIAGARA, REG. MUN.
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : LAKE ONTARIO
MINOR BASIN : ONTARIO
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 1,075

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.87	0.81	1.15	1.11	1.25	1.12	0.75	0.73	1.66	1.28	1.20	0.74	1.06	
LAGOON DISCHARGE	26.94	22.78	35.63	33.09	38.77	33.49	23.06	22.77	49.58	39.56	35.95	22.90	32.04	
BOD5														
INFLUENT (MG/L)	191.0	184.0	221.0	116.0	172.0	232.0	338.0	230.0	1,653.0	1,314.0	586.0	476.0	476.1	
EFFLUENT (MG/L)	8.0	11.1	11.7	17.6	5.1	8.9	4.2	3.9	5.0	3.4	4.4	7.1	7.5	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	6.96	8.99	13.45	19.53	6.37	9.96	3.15	2.84	8.30	4.35	5.28	5.25	7.95	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	101.0	139.0	89.0	89.0	99.0	113.0	128.0	257.0	507.0	293.0	124.0	165.0	175.3	
EFFLUENT (MG/L)	6.5	6.4	82.5	20.5	7.4	3.6	4.4	4.6	5.3	6.2	10.5	9.3	13.9	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	5.65	5.18	94.87	22.75	9.25	4.03	3.30	3.35	8.79	7.93	12.60	6.88	14.73	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	4.7	8.5	4.1	4.5	4.5	4.3	4.2	6.2	9.3	7.5	3.6	8.1	5.8	
EFFLUENT (MG/L)	4.5	3.3	3.2	2.9	2.5	0.7	1.0	1.8	3.5	2.9	2.2	2.4	2.6	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	3.91	2.67	3.68	3.21	3.12	0.78	0.75	1.31	5.81	3.71	2.64	1.77	2.76	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	NA	NA

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES

	START DATE	END DATE	ANTICIPATED COMPLIANCE
COLLECTION SYSTEM - SEWAGE UPGRADE UNDERWAY			

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : GUELPH
PLANT : GUELPH WPCP
WORKS NUMBER : 1200030004
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL CONTINUOUS
: EFFLUENT POLISHING
DESIGN CAPACITY : 54.55 (1000 M3)

REGION : WEST CENTRAL
DISTRICT : WELLINGTON
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : SPEED RIVER
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 82,000

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	44.34	44.49	44.04	46.62	42.68	45.06	35.73	32.88	46.96	45.09	44.91	44.91	43.23	
BOD5														
INFLUENT (MG/L)	257.0	189.0	207.0	164.0	166.0	186.0	171.0	205.0	240.0	166.0	194.0	194.0	184.1	
EFFLUENT (MG/L)	4.2	4.3	8.3	11.5	7.1	5.9	4.6	4.5	3.9	6.5	6.2	3.0	5.8	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	186.22	191.30	365.53	536.01	310.12	265.97	164.35	147.96	183.14	293.08	278.44	134.73	250.73	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	187.0	194.0	196.0	171.0	178.0	211.0	191.0	238.0	306.0	208.0	221.0	192.0	207.8	
EFFLUENT (MG/L)	11.4	9.5	10.8	12.0	6.9	8.3	7.0	5.9	7.9	8.2	6.3	7.9	8.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	505.47	422.65	475.63	559.32	531.39	574.16	250.11	193.99	370.98	369.73	282.93	354.78	367.46	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	7.6	7.7	7.4	7.1	6.6	6.3	5.3	6.9	6.1	5.8	7.2	7.3	6.8	
EFFLUENT (MG/L)	0.8	0.9	0.6	0.5	0.4	0.4	0.5	0.6	0.6	0.5	0.7	0.7	0.6	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	35.47	40.04	26.42	23.30	17.47	18.03	17.86	19.72	28.17	22.54	31.43	31.43	25.94	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (E.G. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES	START DATE	END DATE	ANTICIPATED COMPLIANCE
OPERATIONAL/PROCESS - MINOR PROCESS/OPERATIONAL MODIFICATION			1989/10

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : HALDIMAND
PLANT : CALEDONIA WPCP
WORKS NUMBER : 120001452
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL-CONTINUOUS
:
DESIGN CAPACITY : 2.27 (1000 M3)

REGION : WEST CENTRAL
DISTRICT : HALDIMAN-NORFOLK, REG. MUN.
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : GRAND RIVER
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 5,655

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	2.50	2.40	3.18	3.45	2.68	1.87	2.36	2.19	2.39	2.26	2.79	2.44	2.54	
BOD5														
INFLUENT (MG/L)	115.0	130.0	91.0	111.0	110.0	136.0	293.0	207.0	172.0	225.0	213.0	124.0	160.6	
EFFLUENT (MG/L)	19.1	17.3	26.6	21.6	26.1	34.0	45.2	19.7	18.7	15.5	9.5	16.4	22.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	47.75	41.52	84.58	74.52	69.94	63.58	106.67	43.14	44.69	35.03	26.50	40.01	57.15	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	174.0	255.0	211.0	266.0	202.0	253.0	236.0	350.0	305.0	278.0	200.0	200.0	244.2	
EFFLUENT (MG/L)	13.3	17.4	16.0	13.8	22.0	18.3	15.9	11.3	19.8	10.8	6.2	9.0	14.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	33.25	41.76	50.88	47.61	58.96	34.22	37.52	24.74	47.32	24.40	17.29	21.96	36.83	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.6	6.5	6.2	5.5	5.6	6.9	6.3	6.9	6.9	7.3	6.3	7.4	6.5	
EFFLUENT (MG/L)	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.2	0.4	0.3	0.3	0.3	0.3	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	0.75	0.72	0.95	1.38	0.80	0.56	0.70	0.43	0.95	0.67	0.83	0.73	0.76	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NO REMEDIAL MEASURES REPORTED

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : HALDIMAND
PLANT : CAYUGA WPCP
WORKS NUMBER : 110000089
TREATMENT : OXIDATION DITCH
: PHOSPHORUS REMOVAL CONTINUOUS
:
DESIGN CAPACITY : 0.90 (1000 M3)

REGION : WEST CENTRAL
DISTRICT : HALDIMAN-NORFOLK, REG. MUN.
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : GRAND RIVER
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 1,258

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.53	0.45	0.62	0.69	0.67	0.55	0.42	0.35	0.43	0.42	0.62	0.42	0.51	
BOD5														
INFLUENT (MG/L)	91.0	106.0	117.0	68.0	105.0	152.0	165.0	283.0	169.0	239.0	133.0	156.0	148.7	
EFFLUENT (MG/L)	5.8	2.3	2.8	7.7	0.9	0.5	1.3	0.5	0.6	0.7	2.3	0.3	2.1	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	3.07	1.03	1.73	5.31	0.60	0.27	0.54	0.17	0.25	0.29	1.42	0.12	1.07	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	100.0	173.0	166.0	120.0	130.0	137.0	190.0	501.0	222.0	170.0	130.0	177.0	184.7	
EFFLUENT (MG/L)	10.5	10.3	10.0	18.0	11.3	0.5	3.5	4.0	10.0	1.7	7.8	4.7	7.7	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	5.56	4.63	6.20	12.42	7.57	0.27	1.47	1.40	4.30	0.71	4.83	1.97	3.93	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	5.7	6.2	7.2	5.3	6.7	7.7	11.5	10.2	8.6	0.8	7.1	7.3	7.0	
EFFLUENT (MG/L)	0.3	0.5	0.4	0.5	0.4	0.2	0.3	0.5	0.5	0.3	0.4	0.4	0.4	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	0.15	0.22	0.24	0.34	0.26	0.11	0.12	0.17	0.21	0.12	0.24	0.16	0.20	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NO REMEDIAL MEASURES REPORTED

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : HALDIMAND
PLANT : HAGERSVILLE WPCP
WORKS NUMBER : 110001024
TREATMENT : EXTENDED AERATION
: PHOSPHORUS REMOVAL-CONTINUOUS
: AEROBIC SINGLE STAGE
DESIGN CAPACITY : 1.00 (1000 M3)

REGION : WEST CENTRAL
DISTRICT : HALDIMAN-NORFOLK, REG. MUN.
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : SANDUSK CREEK
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 2,268

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.27	1.25	1.73	1.64	1.39	1.15	0.72	0.66	0.89	0.81	1.36	0.91	1.15	
BOD5														
INFLUENT (MG/L)	251.0	156.0	292.0	250.0	125.0	242.0	147.0	344.0	150.0	317.0	185.0	293.0	229.3	
EFFLUENT (MG/L)	5.6	10.4	14.5	7.9	3.6	19.9	6.6	34.6	31.5	13.7	16.7	7.7	14.4	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	7.11	13.00	25.08	12.95	5.00	22.88	4.75	22.83	28.03	11.09	22.71	7.00	16.56	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	133.0	129.0	133.0	150.0	65.0	126.0	141.0	240.0	131.0	200.0	136.0	191.0	147.9	
EFFLUENT (MG/L)	7.8	7.8	15.3	18.5	7.5	8.5	6.5	13.0	8.0	9.0	9.5	7.7	9.9	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	9.90	9.75	26.46	30.34	10.42	9.77	4.68	8.58	7.12	7.29	12.92	7.00	11.39	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	9.6	4.9	7.6	8.2	5.1	8.7	6.9	6.9	6.6	9.0	6.5	8.7	7.4	
EFFLUENT (MG/L)	0.3	0.2	0.6	0.3	0.3	0.4	0.5	1.0	0.8	0.4	0.5	0.4	0.5	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	0.38	0.25	1.03	0.49	0.41	0.46	0.36	0.66	0.71	0.32	0.68	0.36	0.58	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NO REMEDIAL MEASURES REPORTED

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : HAMILTON
PLANT : WOODWARD AVE.WPCP (OFFSITE CHEM.ADDN)
WORKS NUMBER : 1200015504
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHOROUS REMOVAL CONTINUOUS
:
DESIGN CAPACITY : 409.14 (1000 M3)

REGION : WEST CENTRAL
DISTRICT : HAMILTON-WENTWORTH, REG. MUN.
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : REDHILL CREEK
MINOR BASIN : ONTARIO
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 300,000

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	233.66	276.85	345.50	316.86	345.95	360.95	338.22	309.13	285.03	283.22	339.13	292.31	310.57	
BOD5														
INFLUENT (MG/L)	189.0	227.0	182.0	158.0	119.0	125.0	91.0	107.0	105.0	132.0	106.0	151.0	141.0	
EFFLUENT (MG/L)	12.0	8.0	13.0	12.0	9.0	7.0	3.0	4.0	6.0	7.0	4.0	5.0	7.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	2803.92	2214.80	4491.50	3802.32	3113.55	2526.65	1014.66	1236.52	1710.18	1982.54	1356.52	1461.55	2329.28	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	482.0	586.0	477.0	384.0	304.0	335.0	365.0	249.0	241.0	357.0	259.0	401.0	370.0	
EFFLUENT (MG/L)	25.0	13.0	28.0	19.0	17.0	17.0	12.0	10.0	15.0	13.0	9.0	8.0	15.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	5841.50	3599.05	9674.00	6020.34	5881.15	6136.15	4058.64	3091.30	4275.45	3681.86	3052.17	2338.48	4813.84	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	4.8	6.8	5.6	4.8	3.9	4.3	4.6	4.0	3.5	5.8	3.9	5.7	4.8	
EFFLUENT (MG/L)	0.7	0.3	0.5	0.4	0.5	0.4	0.5	0.4	0.5	0.4	0.3	0.3	0.4	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	163.56	83.05	172.75	126.74	172.97	144.38	169.11	123.65	142.51	113.28	101.73	87.69	124.23	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NO REMEDIAL MEASURES REPORTED

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : HARRISTON
PLANT : HARRISTON LAGOON
WORKS NUMBER : 110000329
TREATMENT : AERATED LAGOON
: SEASONAL DISCHARGE
:
DESIGN CAPACITY : 0.99 (1000 M3)

REGION : WEST CENTRAL
DISTRICT : WELLINGTON
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : MAITLAND RIVER
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 1,963

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.76	1.44	1.85	1.89	1.48	1.60	1.00	1.15	1.19	1.28	1.81	1.41	1.49	
LAGOON DISCHARGE	51.63	26.20	22.37	69.45	ND	ND	ND	ND	ND	ND	24.36	46.64	40.11	
BOD5														
INFLUENT (MG/L)	116.0	236.0	119.0	133.0	128.0	124.0	167.0	140.0	144.0	156.0	87.0	181.0	144.3	
EFFLUENT (MG/L)	3.6	8.3	7.0	9.1	ND	ND	ND	ND	ND	ND	2.5	10.0	6.8	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	6.33	11.95	12.95	17.19	ND	ND	ND	ND	ND	ND	4.52	14.10	10.13	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	198.0	434.0	197.0	211.0	177.0	195.0	157.0	192.0	259.0	231.0	64.0	196.0	209.3	
EFFLUENT (MG/L)	4.1	8.6	6.0	10.8	ND	ND	ND	ND	ND	ND	6.0	12.4	8.0	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	7.21	12.38	11.10	20.41	ND	ND	ND	ND	ND	ND	10.86	17.48	11.92	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	8.3	13.9	7.1	7.4	6.6	7.7	7.1	6.9	7.3	7.8	4.7	7.4	7.7	
EFFLUENT (MG/L)	0.2	0.2	0.1	0.2	ND	ND	ND	ND	ND	ND	0.6	0.9	0.4	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	0.35	0.28	0.18	0.37	ND	ND	ND	ND	ND	ND	1.08	1.26	0.60	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	NA	NA

NO REMEDIAL MEASURES REPORTED

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : KITCHENER
PLANT : KITCHENER WPCP
WORKS NUMBER : 110000374
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL-CONTINUOUS
:
DESIGN CAPACITY : 122.74 (1000 M3)

REGION : WEST CENTRAL
DISTRICT :
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : GRAND RIVER
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 138,271

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	73.02	69.63	71.42	73.46	70.28	73.80	63.84	63.74	63.97	63.07	69.22	61.66	68.09	
BOD5														
INFLUENT (MG/L)	218.0	207.0	193.0	226.0	242.0	194.0	185.0	184.0	170.0	204.0	281.0	294.0	216.5	
EFFLUENT (MG/L)	8.9	8.4	6.6	15.3	16.3	15.7	15.7	9.6	10.5	13.7	16.5	18.0	12.9	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	649.87	584.89	471.37	1123.93	1145.56	1158.66	1002.28	611.90	671.68	864.05	1142.13	1109.88	878.36	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	250.0	236.0	189.0	221.0	239.0	240.0	231.0	252.0	249.0	240.0	261.0	261.0	239.1	
EFFLUENT (MG/L)	6.3	7.1	5.0	4.4	5.4	4.8	10.8	6.7	4.1	5.8	4.2	3.3	5.7	-
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	460.02	494.37	357.10	323.22	379.51	354.24	689.47	427.05	262.27	365.80	290.72	203.47	388.11	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.6	7.0	7.0	6.1	6.5	6.5	6.9	ND	7.4	7.0	6.8	7.7	6.9	
EFFLUENT (MG/L)	0.7	0.6	0.6	0.7	0.9	0.8	1.0	1.0	1.0	0.7	0.6	0.4	0.8	-
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		---
LOADING (KG/D)	51.11	41.77	42.85	51.42	63.25	59.04	63.84	63.74	63.97	44.14	41.53	24.66	54.47	---

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : MOUNT FOREST
PLANT : MOUNT FOREST WPCP
WORKS NUMBER : 120001381
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL-CONTINUOUS
:
DESIGN CAPACITY : 2.45 (1000 M3)

REGION : WEST CENTRAL
DISTRICT : WELLINGTON
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : SAUGEEN RIVER
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 3,599

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	2.32	1.86	3.00	2.81	1.97	1.74	1.37	1.44	1.56	1.78	2.41	1.81	2.01	
BOD5														
INFLUENT (MG/L)	75.0	97.0	99.0	48.0	96.0	111.0	204.0	165.0	129.0	122.0	97.0	111.0	112.8	
EFFLUENT (MG/L)	1.5	2.3	1.3	1.1	8.9	7.6	3.0	1.9	1.8	0.8	3.4	1.0	2.9	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	3.48	4.27	3.90	3.09	17.53	13.22	4.11	2.73	2.80	1.42	8.19	1.81	5.83	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	54.0	102.0	132.0	162.0	153.0	143.0	191.0	193.0	146.0	122.0	93.0	256.0	145.6	
EFFLUENT (MG/L)	4.0	7.0	4.5	9.0	14.7	7.3	6.7	5.7	5.0	4.1	5.6	4.1	6.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	9.28	13.02	13.50	25.29	28.95	12.70	9.17	8.20	7.80	7.29	13.49	7.42	13.07	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	4.2	ND	4.5	3.2	5.7	5.5	7.3	6.9	6.0	5.1	4.8	6.6	5.4	
EFFLUENT (MG/L)	0.2	ND	0.2	0.2	0.7	0.6	0.3	0.3	0.3	0.2	0.2	0.2	0.3	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	0.46	ND	0.60	0.56	1.37	1.04	0.41	0.43	0.46	0.35	0.48	0.36	0.60	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NO REMEDIAL MEASURES REPORTED

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : NANTICOKE
PLANT : JARVIS LAGOON
WORKS NUMBER : 120001434
TREATMENT : CONVENTIONAL LAGOON SEASONAL
: PHOSPHORUS REMOVAL - BATCH
:
DESIGN CAPACITY : 0.85 (1000 M3)

REGION : WEST CENTRAL
DISTRICT : HALDIMAN NORFOLK, REG. MUN.
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : SANDUSK CREEK
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 1,174

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.92	0.90	1.01	1.18	0.96	0.97	0.72	0.87	0.53	0.54	0.71	0.63	0.83	
LAGOON DISCHARGE	ND	ND	82.96	ND	ND	ND	ND	ND	ND	ND	ND	ND	82.96	
BOD5														
INFLUENT (MG/L)	91.0	103.0	210.0	54.0	96.0	176.0	130.0	191.0	233.0	197.0	ND	191.0	152.0	
EFFLUENT (MG/L)	ND	ND	16.9	ND	ND	ND	ND	ND	ND	ND	ND	22.0	19.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	17.06	ND	ND	ND	ND	ND	ND	ND	ND	13.86	16.19	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	147.0	199.0	212.0	105.0	99.0	180.0	176.0	278.0	241.0	390.0	ND	208.0	203.2	
EFFLUENT (MG/L)	ND	ND	37.9	ND	ND	ND	ND	ND	ND	ND	ND	30.5	34.2*	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	38.27	ND	ND	ND	ND	ND	ND	ND	ND	19.21	28.39	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	7.0	7.4	7.2	5.0	6.6	6.3	7.1	8.8	10.7	11.0	ND	9.8	7.9	
EFFLUENT (MG/L)	ND	ND	0.5	ND	ND	ND	ND	ND	ND	ND	ND	0.2	0.4	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	0.50	ND	ND	ND	ND	ND	ND	ND	ND	0.12	0.33	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	NO
TP	1.0 MG/L	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES

	START DATE	END DATE	ANTICIPATED COMPLIANCE
FACILITY EXPANSION/UPGRADING - CONSTRUCTION COMPLETE		1989/08	1990

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : NANTICOKE
PLANT : PORT DOVER WPCP
WORKS NUMBER : 110000604
TREATMENT : PRIMARY
: PHOSPHORUS REMOVAL-CONTINUOUS
:
DESIGN CAPACITY : 4.09 (1000 M3)

REGION : WEST CENTRAL
DISTRICT : HALDIMAN-NORFOLK, REG. MUN.
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : LAKE ERIE
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 4,750

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	3.01	3.55	3.52	3.98	3.00	2.87	2.64	3.09	3.67	134.45	4.37	3.52	14.31	
BOD5														
INFLUENT (MG/L)	65.0	104.0	203.0	53.0	142.0	80.0	140.0	183.0	230.0	166.0	129.0	83.0	131.5	
EFFLUENT (MG/L)	14.3	32.1	12.7	10.3	16.3	11.2	9.9	20.7	89.5	66.7	26.8	36.0	28.9	
LOADING (KG/D)	43.04	113.95	44.70	40.99	48.90	32.14	26.13	63.96	328.46	8967.81	117.11	126.72	413.56	
PERCENT REMOVAL	78	69	94	81	89	86	93	89	61	60	79	57	78	
PERCENT REMOVAL LIMITS													50	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	104.0	138.0	152.0	97.0	173.0	90.0	132.0	131.0	90.0	113.0	181.0	94.0	124.6	
EFFLUENT (MG/L)	25.5	18.3	25.6	14.3	23.8	12.9	12.8	21.0	44.8	45.3	23.9	24.8	24.4	
LOADING (KG/D)	76.75	64.96	90.11	56.91	71.40	37.02	33.79	64.89	164.41	6090.58	104.44	87.29	349.16	
PERCENT REMOVAL	75	87	83	85	86	86	90	84	50	60	87	74	80	
PERCENT REMOVAL LIMITS													70	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	3.7	4.3	6.7	2.9	5.8	3.8	5.3	5.5	8.7	5.7	5.1	3.9	5.1	
EFFLUENT (MG/L)	0.6	0.5	0.5	0.3	0.5	0.3	0.4	0.8	1.9*	1.3*	0.7	0.7	0.7	2
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	1.80	1.77	1.76	1.19	1.50	0.86	1.05	2.47	6.97	174.78	3.05	2.46	10.02	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	50%	YES
SS	70%	YES
TP	1.0 MG/L	NO

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES	START DATE	END DATE	ANTICIPATED COMPLIANCE
FACILITY EXPANSION/UPGRADING - UPGRADING TO SECONDARY TREATMENT	1991/03	1992/09	1993

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : NANTICOKE
PLANT : STELCO IND. PARK LAGOON
WORKS NUMBER : 110003371
TREATMENT : CONVENTIONAL LAGOON SEASONAL
: PHOSPHOROUS REMOVAL CONTINUOUS
:
DESIGN CAPACITY : 0.50 (1000 M3)

REGION : WEST CENTRAL
DISTRICT : HALDIMAN NORFOLK, REG. MUN.
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : CENTER CR
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES
POPULATION SERVED :

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.17	0.19	0.17	0.21	0.23	0.25	0.21	0.23	0.21	0.26	0.23	0.16	0.21	
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	44.73	ND	ND	44.73	
BOD5														
INFLUENT (MG/L)	76.0	9.0	13.0	9.0	55.0	13.0	6.0	3.0	14.0	9.0	5.0	56.0	22.3	
EFFLUENT (MG/L)	1.7	ND	ND	ND	ND	ND	ND	ND	ND	2.9	ND	ND	2.3	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	0.28	ND	ND	ND	ND	ND	ND	ND	ND	0.75	ND	ND	0.48	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	153.0	62.0	28.0	30.0	55.0	44.0	29.0	15.0	36.0	16.0	34.0	263.0	63.8	
EFFLUENT (MG/L)	4.2	ND	ND	ND	ND	ND	ND	ND	ND	3.9	ND	ND	4.1	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	0.71	ND	ND	ND	ND	ND	ND	ND	ND	1.01	ND	ND	0.86	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	3.5	5.8	1.3	0.8	4.0	0.8	1.4	4.0	ND	0.6	1.2	1.1	2.2	
EFFLUENT (MG/L)	0.6	ND	ND	ND	ND	ND	ND	ND	ND	0.2	ND	ND	0.4	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	0.10	ND	ND	ND	ND	ND	ND	ND	ND	0.05	ND	ND	0.08	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	1.0 MG/L	YES

NO REMEDIAL MEASURES REPORTED

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : NANTICOKE
PLANT : TOWNSEND LAGOON
WORKS NUMBER : 110003424
TREATMENT : CONVENTIONAL LAGOON SEASONAL
: PHOSPHORUS REMOVAL - BATCH
:
DESIGN CAPACITY : 2.095 (1000 M3)

REGION : WEST CENTRAL
DISTRICT : HALDIMAN-NORFOLK, REG. MUN.
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : NANTICOKE CREEK
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 537

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.13	0.14	0.16	0.25	0.15	0.16	0.16	0.13	0.16	0.20	0.20	0.17	0.17	
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BOD5														
INFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
SUSPENDED SOLIDS														
INFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	NO DIRECT DISCHARGE
SS	25.0 MG/L	NO DIRECT DISCHARGE
TP	1.0 MG/L	NO DIRECT DISCHARGE

NO REMEDIAL MEASURES REPORTED

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : NANTICOKE
PLANT : WATERFORD LAGOON
WORKS NUMBER : 110001195
TREATMENT : AERATED CELL PLUS LAGOON
: CONTINUOUS DISCHARGE
: PHOSPHORUS REMOVAL CONTINUOUS
DESIGN CAPACITY : 2.13 (1000 M3)

REGION : WEST CENTRAL
DISTRICT : HALDIMAN-NORFOLK, REG. MUN.
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : NANTICOKE CREEK
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 2,550

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCLED
AVG. DAILY FLOW (1000 M3)	1.22	1.21	1.15	1.01	0.92	0.94	1.15	1.55	1.29	1.47	1.39	0.74	1.17	
LAGOON DISCHARGE	37.88	33.86	35.78	30.38	28.65	28.77	35.77	48.12	38.71	45.69	41.87	22.92	35.70	
BOD5														
INFLUENT (MG/L)	114.0	95.0	103.0	94.0	94.0	114.0	128.0	139.0	131.0	125.0	148.0	105.0	115.8	
EFFLUENT (MG/L)	9.2	15.0	17.1	14.8	16.7	9.4	10.6	7.7	16.9	18.5	19.2	14.6	14.1	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	11.22	18.15	19.66	14.94	15.36	8.83	12.19	11.93	21.80	27.19	26.68	10.80	16.50	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	141.0	115.0	152.0	135.0	119.0	141.0	129.0	108.0	124.0	102.0	137.0	97.0	125.0	
EFFLUENT (MG/L)	15.7	27.1	20.5	16.6	32.5	32.7	17.0	11.5	36.5	28.4	31.1	22.4	24.3	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	19.15	32.79	23.57	16.76	29.90	30.73	19.55	17.82	47.08	41.74	43.22	16.57	28.43	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	5.7	5.0	5.5	5.3	5.7	4.9	6.1	6.7	5.0	5.5	6.0	5.4	5.6	
EFFLUENT (MG/L)	0.2	0.4	0.4	0.3	0.3	0.2	0.3	0.2	0.2	0.3	0.4	0.3	0.3	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	0.24	0.48	0.46	0.30	0.27	0.18	0.34	0.31	0.25	0.44	0.55	0.22	0.35	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	1.0 MG/L	YES

NO REMEDIAL MEASURES REPORTED

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : NIAGARA FALLS
PLANT : STAMFORD WPCP
WORKS NUMBER : 120001363
TREATMENT : ROTATING BIOLOGICAL CONTACTOR
: PHOSPHORUS REMOVAL-CONTINUOUS
:
DESIGN CAPACITY : 58.18 (1000 M3)

REGION : WEST CENTRAL
DISTRICT : NIAGARA, REG. MUN.
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : CHIPPAWA POWER CANAL
MINOR BASIN : ONTARIO
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 67,835

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	52.01	47.80	58.40	60.30	68.20	64.80	56.61	52.74	53.60	54.50	63.04	44.55	56.38	
BOD5														
INFLUENT (MG/L)	43.0	87.0	59.0	138.0	87.0	46.0	96.0	84.0	98.0	88.0	46.0	67.0	78.3	
EFFLUENT (MG/L)	13.0	15.0	11.5	16.0	14.0	10.0	14.0	24.0	13.0	15.0	21.0	17.2	15.3	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	676.13	717.00	671.60	964.80	954.80	648.00	792.54	1265.76	696.80	817.50	1323.84	766.26	862.61	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	98.0	124.0	166.0	113.0	122.0	144.0	136.0	110.0	108.0	5.0	80.0	87.0	107.8	
EFFLUENT (MG/L)	20.6	18.0	23.0	17.0	16.0	17.0	18.0	18.0	19.6	18.0	18.0	17.6	18.4	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	1071.40	860.40	1343.20	1025.10	1091.20	1101.60	1018.98	949.32	1050.56	981.00	1134.72	784.08	1037.39	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	4.2	4.1	3.7	5.6	5.1	4.8	5.9	4.6	4.2	4.7	3.1	3.7	4.5	
EFFLUENT (MG/L)	0.2	0.2	0.6	0.3	0.5	0.4	0.8	0.8	0.5	1.0	0.6	0.6	0.5	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	10.40	9.56	35.04	18.09	34.10	25.92	45.28	42.19	26.80	54.50	37.82	26.73	28.19	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES

	START DATE	END DATE	ANTICIPATED COMPLIANCE
COLLECTION SYSTEM - COLLECTION SYSTEM UNDER REVIEW			
COLLECTION SYSTEM - SEWAGE UPGRADE UNDERWAY			

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : NIAGARA ON THE LAKE
PLANT : NIAGARA ON THE LAKE LAGOON
WORKS NUMBER : 120001238
TREATMENT : AERATED CELL PLUS LAGOON
: CONTINUOUS DISCHARGE
:
DESIGN CAPACITY : 3.84 (1000 M3)

REGION : WEST CENTRAL
DISTRICT : NIAGARA, REG. MUN.
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : LAKE ONTARIO
MINOR BASIN : ONTARIO
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 5,210

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	2.60	2.30	3.20	4.20	5.30	4.50	3.13	2.91	3.00	2.89	3.25	2.61	3.32	
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BOD5														
INFLUENT (MG/L)	104.0	45.0	104.0	46.0	117.0	94.0	97.0	130.0	189.0	207.0	110.0	100.0	111.9	
EFFLUENT (MG/L)	14.0	12.0	17.4	19.8	30.0	20.0	32.0	25.0	38.0	22.0	12.0	14.1	21.4	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	36.40	27.60	55.68	83.16	159.00	90.00	100.16	72.75	114.00	63.58	39.00	36.80	71.05	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	82.0	141.0	132.0	70.0	144.0	148.0	116.0	142.0	177.0	221.0	115.0	157.0	137.1	
EFFLUENT (MG/L)	17.0	15.0	22.5	35.0	26.0	30.0	33.0	34.0	35.0	28.0	27.0	14.5	26.4	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	44.20	34.50	72.00	147.00	137.80	135.00	103.29	98.94	105.00	80.92	87.75	37.84	87.65	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.6	6.5	6.1	3.3	6.2	6.8	6.5	5.8	8.5	6.3	5.6	3.9	6.0	
EFFLUENT (MG/L)	5.3	6.0	6.0	3.8	3.9	4.6	3.1	3.0	3.3	2.9	3.9	3.5	4.1	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	13.78	13.80	19.20	15.96	20.67	20.70	9.70	8.73	9.90	8.38	12.67	9.13	13.61	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	NA	NA

NO REMEDIAL MEASURES REPORTED

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : NORFOLK
PLANT : PORT ROWAN LAGOON
WORKS NUMBER : 110001113
TREATMENT : CONVENTIONAL LAGOON SEASONAL
: PHOSPHORUS REMOVAL - BATCH
:
DESIGN CAPACITY : 0.25 (1000 M3)

REGION : WEST CENTRAL
DISTRICT : HALDIMAN-NORFOLK, REG. MUN.
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : DEDRICH CREEK
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 744

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.27	0.25	0.28	0.29	0.27	0.29	0.26	0.25	0.26	0.25	0.30	0.27	0.27	
LAGOON DISCHARGE	ND	ND	ND	93.35	ND	ND	ND	ND	ND	ND	ND	ND	93.35	
BOD5														
INFLUENT (MG/L)	123.0	104.0	83.0	58.0	150.0	170.0	ND	116.0	173.0	215.0	110.0	39.0	121.9	
EFFLUENT (MG/L)	ND	ND	ND	9.5	ND	ND	ND	ND	ND	ND	ND	ND	9.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	2.75	ND	ND	ND	ND	ND	ND	ND	ND	2.57	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	190.0	198.0	96.0	50.0	132.0	127.0	ND	139.0	213.0	344.0	232.0	28.0	159.0	
EFFLUENT (MG/L)	ND	ND	ND	20.3	ND	ND	ND	ND	ND	ND	ND	ND	20.3	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	5.88	ND	ND	ND	ND	ND	ND	ND	ND	5.48	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	9.3	4.8	9.5	2.0	8.3	5.4	ND	5.4	8.9	13.4	5.4	2.1	6.8	
EFFLUENT (MG/L)	ND	ND	ND	0.7	ND	ND	ND	ND	ND	ND	ND	ND	0.7	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	0.20	ND	ND	ND	ND	ND	ND	ND	ND	0.19	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NO REMEDIAL MEASURES REPORTED

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : NORTH DUMFRIES
PLANT : AYR PV WPCP
WORKS NUMBER : 1100019443
TREATMENT : EXTENDED AERATION
: PHOSPHORUS REMOVAL-CONTINUOUS
:
DESIGN CAPACITY : 1.18 (1000 M3)

REGION : WEST CENTRAL
DISTRICT :
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : NITH RIVER
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 1,281

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.47	0.47	0.50	0.50	0.48	0.50	0.50	0.48	0.52	0.39	0.50	0.54	0.49	
BOD5														
INFLUENT (MG/L)	64.0	74.0	95.0	68.0	31.0	91.0	67.0	67.0	37.0	58.0	107.0	28.0	65.6	
EFFLUENT (MG/L)	7.9	2.4	5.3	2.5	7.3	4.5	4.5	8.9	21.5	11.9	7.8	21.0	8.8	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	3.71	1.12	2.65	1.25	3.50	2.25	2.25	4.27	11.18	4.64	3.90	11.34	4.31	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	32.0	109.0	126.0	75.0	33.0	102.0	86.0	79.0	61.0	54.0	79.0	25.0	71.8	--
EFFLUENT (MG/L)	4.2	4.8	4.5	19.0	14.0	6.1	3.3	3.5	6.0	6.8	4.5	6.8	7.0	--
CONCENTRATION LIMIT (MG/L)													25.0	--
LOADING (KG/D)	1.97	2.25	2.25	9.50	6.72	3.05	1.65	1.68	3.12	2.65	2.25	3.67	3.43	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	3.0	5.0	6.0	4.0	3.2	4.2	5.4	4.6	3.5	2.8	5.3	2.9	4.2	
EFFLUENT (MG/L)	0.5	0.5	0.9	0.7	0.7	0.5	0.4	0.4	0.5	0.5	0.6	0.6	0.6	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	0.23	0.23	0.45	0.35	0.33	0.25	0.20	0.19	0.26	0.19	0.30	0.32	0.29	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NO REMEDIAL MEASURES REPORTED

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : ORANGEVILLE
PLANT : ORANGEVILLE WPCP
WORKS NUMBER : 110000542
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL-CONTINUOUS
: EFFLUENT POLISHING
DESIGN CAPACITY : 14.54 (1000 M3)

REGION : WEST CENTRAL
DISTRICT : DUFFERIN
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : CREDIT RIVER
MINOR BASIN : ONTARIO
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 16,515

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	9.28	8.26	9.61	10.75	10.09	11.71	8.22	7.68	7.19	7.25	9.96	7.94	9.00	
BOD5														
INFLUENT (MG/L)	160.0	174.0	208.0	168.0	162.0	96.0	117.0	131.0	166.0	188.0	189.0	175.0	161.2	
EFFLUENT (MG/L)	2.3	0.5	0.7	1.2	1.9	0.9	0.3	0.7	0.5	0.4	1.5	0.4	0.9	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	21.34	4.13	6.72	12.90	19.17	10.53	2.46	5.37	3.59	2.90	14.94	3.17	8.10	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	165.0	162.0	151.0	119.0	175.0	161.0	185.0	174.0	190.0	159.0	168.0	159.0	164.0	
EFFLUENT (MG/L)	2.7	2.7	3.4	4.5	3.6	2.7	2.1	2.2	2.3	1.7	2.0	2.3	2.7	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	25.05	22.30	32.67	48.37	36.32	31.61	17.26	16.89	16.53	12.32	19.92	18.26	24.30	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	5.1	7.7	5.7	7.1	9.2	4.5	5.7	5.8	6.4	6.7	5.7	6.5	6.3	
EFFLUENT (MG/L)	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.1	0.1	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	0.92	0.82	0.96	2.15	1.00	1.17	0.82	1.53	1.43	1.45	1.99	0.79	0.90	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NO REMEDIAL MEASURES REPORTED

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : PALMERSTON
PLANT : PALMERSTON WPCP
WORKS NUMBER : 110001088
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
:
:
DESIGN CAPACITY : 0.68 (1000 M3)

REGION : WEST CENTRAL
DISTRICT : WELLINGTON
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : WALLACE DRAIN
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 2,050

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.16	0.91	1.32	1.47	0.88	0.78	0.63	0.68	0.74	0.85	1.36	0.92	0.98	
BOD5														
INFLUENT (MG/L)	130.0	111.0	295.0	78.0	104.0	147.0	137.0	131.0	132.0	182.0	103.0	171.0	143.4	
EFFLUENT (MG/L)	6.1	11.1	5.3	3.3	3.4	1.4	2.1	1.4	1.3	1.6	2.5	6.5	3.8	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	7.07	10.10	6.99	4.85	2.99	1.09	1.32	0.95	0.96	1.36	3.40	5.98	3.72	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	113.0	117.0	242.0	84.0	230.0	215.0	152.0	93.0	226.0	256.0	144.0	101.0	164.4	
EFFLUENT (MG/L)	12.2	15.7	11.8	15.6	9.1	9.0	4.8	3.4	5.4	7.5	5.2	5.6	8.8	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	14.15	14.28	15.57	22.93	8.00	7.02	3.02	2.31	3.99	6.37	7.07	5.15	8.62	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.5	5.6	5.4	4.3	ND	6.6	7.0	5.5	8.2	8.7	4.6	4.3	6.1	
EFFLUENT (MG/L)	0.3	0.3	0.4	0.2	0.3	0.7	0.9	0.5	0.5	0.3	0.4	0.4	0.4	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	0.34	0.27	0.52	0.29	0.26	0.54	0.56	0.34	0.37	0.25	0.54	0.36	0.39	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	NA	NA

NO REMEDIAL MEASURES REPORTED

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : PARIS
PLANT : PARIS WPCP
WORKS NUMBER : 110001097
TREATMENT : EXTENDED AERATION
: PHOSPHORUS REMOVAL-CONTINUOUS
:
DESIGN CAPACITY : 7.04 (1000 M3)

REGION : WEST CENTRAL
DISTRICT : BRANT
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : GRAND RIVER
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 4,359

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	2.05	1.79	2.00	2.11	1.97	2.06	1.90	1.82	1.91	8.39	1.94	1.87	2.48	
BOD5														
INFLUENT (MG/L)	282.0	123.0	152.0	194.0	274.0	144.0	138.0	126.0	ND	174.0	339.0	149.0	190.5	
EFFLUENT (MG/L)	2.9	2.0	0.8	1.3	1.3	1.6	2.2	2.3	7.6	4.6	4.4	4.4	3.0	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	5.94	3.58	1.60	2.74	2.56	3.29	4.18	4.18	14.51	38.59	8.53	8.22	7.44	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	171.0	212.0	201.0	146.0	212.0	131.0	171.0	152.0	ND	157.0	498.0	136.0	198.8	
EFFLUENT (MG/L)	4.9	5.0	4.9	5.0	5.9	8.9	6.8	9.3	ND	6.2	9.3	7.6	6.7	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	10.04	8.95	9.80	10.55	11.62	18.33	12.92	16.92	ND	52.01	18.04	14.21	16.62	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	9.2	7.6	7.2	8.1	8.3	6.7	7.7	6.2	ND	5.4	12.4	7.4	7.8	
EFFLUENT (MG/L)	0.7	0.7	0.7	0.5	0.6	0.7	0.5	0.7	0.5	0.6	0.6	0.6	0.6	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	1.43	1.25	1.40	1.05	1.18	1.44	0.95	1.27	0.95	5.03	1.16	1.12	1.49	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NO REMEDIAL MEASURES REPORTED

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : PORT COLBORNE
PLANT : SEAWAY WPCP
WORKS NUMBER : 120001906
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL CONTINUOUS
:
DESIGN CAPACITY : 15.00 (1000 M3)

REGION : WEST CENTRAL
DISTRICT : NIAGARA, REG. MUN.
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : WELLAND CANAL
MINOR BASIN : ONTARIO
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 15,825

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	9.79	8.61	9.30	12.65	14.46	14.35	10.17	10.65	12.62	12.10	14.49	8.88	11.51	
BOD5														
INFLUENT (MG/L)	94.0	73.0	107.0	61.0	82.0	67.0	133.0	109.0	111.0	117.0	106.0	114.0	97.8	
EFFLUENT (MG/L)	71.6	20.0	6.7	14.2	20.1	23.3	8.7	25.3	38.5	39.7	33.6	18.8	26.7*	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	700.96	172.20	62.31	179.63	290.64	334.35	88.47	269.44	485.87	480.37	486.86	166.94	307.32	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	176.0	105.0	142.0	169.0	195.0	118.0	192.0	177.0	132.0	135.0	139.0	128.0	150.7	
EFFLUENT (MG/L)	5.4	5.3	6.2	7.9	7.1	4.9	3.4	2.8	4.3	4.5	7.1	6.3	5.4	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	52.86	45.63	57.66	99.93	102.66	70.31	34.57	29.82	54.26	54.45	102.87	55.94	62.15	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	8.5	8.2	9.2	7.9	6.8	5.8	6.3	6.6	5.5	8.1	6.9	6.4	7.2	
EFFLUENT (MG/L)	0.8	0.4	0.5	0.5	0.5	0.4	0.4	0.6	0.4	0.6	0.4	0.3	0.5	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	7.83	3.44	4.65	6.32	7.23	5.74	4.06	6.39	5.04	7.26	5.79	2.66	5.76	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	NO
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES

	START DATE	END DATE	ANTICIPATED COMPLIANCE
COLLECTION SYSTEM - INFILTRATION PROBLEMS BEING CORRECTED	1989	1990/04	1990
SLUDGE DISPOSAL/REMOVAL - UPGRADING SLUDGE THICKENING FACILITIES	1989	1990	1991
FACILITY EXPANSION/UPGRADING - FILTRATION ADDED	1989	1990	1991

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : SHELBURNE
PLANT : SHELBURNE WPCP
WORKS NUMBER : 110000659
TREATMENT : OXIDATION DITCH
: PHOSPHORUS REMOVAL-CONTINUOUS
: EFFLUENT POLISHING
DESIGN CAPACITY : 2.04 (1000 M3)

REGION : WEST CENTRAL
DISTRICT : DUFFERIN
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : BOYNE RIVER
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 3,000

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.38	1.27	1.58	1.42	1.70	1.70	1.30	1.27	1.31	1.40	1.68	1.35	1.45	
BOD5														
INFLUENT (MG/L)	237.0	185.0	259.0	219.0	163.0	109.0	144.0	175.0	208.0	240.0	188.0	271.0	199.8	
EFFLUENT (MG/L)	3.9	5.0	8.0	11.4	0.5	0.5	0.5	0.5	0.5	0.5	1.4	3.1	3.0	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	5.38	6.35	12.64	16.18	0.85	0.85	0.65	0.63	0.65	0.70	2.35	4.18	4.35	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	162.0	198.0	173.0	116.0	148.0	140.0	194.0	192.0	186.0	149.0	141.0	158.0	163.1	
EFFLUENT (MG/L)	10.6	19.9	25.4	34.9	5.2	3.0	3.4	2.8	3.4	2.6	4.1	9.7	10.4	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	14.62	25.27	40.13	49.55	8.84	5.10	4.42	3.55	4.45	3.64	6.88	13.09	15.08	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.6	7.2	7.3	6.0	7.3	6.0	8.2	8.6	7.4	7.8	5.5	6.8	7.1	
EFFLUENT (MG/L)	0.4	0.7	0.8	1.8*	0.5	0.6	0.6	0.7	0.5	0.3	0.2	0.4	0.6	1
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	0.55	0.88	1.26	2.55	0.85	1.02	0.78	0.88	0.65	0.42	0.33	0.54	0.87	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	NO

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES	START DATE	END DATE	ANTICIPATED COMPLIANCE
OPERATIONAL/PROCESS - PROCESS CONTROL BEING UPGRADED	1990/01	1990/03	1991/01

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : SIMCOE
PLANT : SIMCOE WPCP
WORKS NUMBER : 110000677
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL CONTINUOUS
: EFFLUENT POLISHING
DESIGN CAPACITY : 15.45 (1000 M3)

REGION : WEST CENTRAL
DISTRICT : HALDIMAN-NORFOLK, REG. MUN.
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : LYNN RIVER
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 13,355

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	8.28	7.93	7.71	8.44	8.20	8.64	8.05	7.67	8.30	8.18	8.32	7.20	8.08	
BOD5														
INFLUENT (MG/L)	188.0	186.0	166.0	168.0	256.0	173.0	195.0	275.0	155.0	198.0	308.0	487.0	229.6	
EFFLUENT (MG/L)	2.0	1.4	1.0	1.1	0.8	4.6	8.3	6.1	0.7	2.3	0.7	0.7	2.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	16.56	11.10	7.71	9.28	6.56	39.74	66.81	46.78	5.81	18.81	5.82	5.04	20.20	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	178.0	888.0	189.0	141.0	178.0	165.0	220.0	227.0	165.0	183.0	240.0	421.0	266.3	
EFFLUENT (MG/L)	3.6	3.5	2.3	4.9	4.3	6.5	4.0	4.3	6.8	3.0	1.3	1.2	3.8	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	29.80	27.75	17.73	41.35	35.26	56.16	32.20	32.98	56.44	24.54	10.81	8.64	30.70	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.5	7.5	6.9	6.3	6.8	6.0	7.2	6.7	6.7	7.0	9.0	13.6	7.5	
EFFLUENT (MG/L)	0.2	0.6	0.2	0.1	0.1	0.2	0.6	0.4	0.3	0.4	0.4	0.2	0.3	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	1.65	4.75	1.54	0.84	0.82	1.72	4.83	3.06	2.49	3.27	3.32	1.44	2.42	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NO REMEDIAL MEASURES REPORTED

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : SOUTH DUMFRIES
PLANT : ST GEORGE PV WPCP
WORKS NUMBER : 110003415
TREATMENT : EXTENDED AERATION
: PHOSPHORUS REMOVAL-CONTINUOUS
: EFFLUENT POLISHING
DESIGN CAPACITY : 1.06 (1000 M3)

REGION : WEST CENTRAL
DISTRICT : BRANT
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : FAIRCHILD CREEK (W. BR)
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 500

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.48	0.43	0.46	0.43	0.42	0.43	0.38	0.49	0.39	0.42	0.47	0.40	0.43	
BOD5														
INFLUENT (MG/L)	112.0	279.0	114.0	125.0	132.0	134.0	97.0	130.0	93.0	161.0	218.0	170.0	147.1	
EFFLUENT (MG/L)	4.1	0.7	2.1	0.7	0.5	0.8	0.6	0.6	1.2	0.8	0.2	0.3	1.1	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	1.96	0.30	0.96	0.30	0.21	0.34	0.22	0.29	0.46	0.33	0.09	0.12	0.47	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	129.0	193.0	188.0	169.0	188.0	196.0	141.0	227.0	235.0	186.0	278.0	249.0	198.3	
EFFLUENT (MG/L)	0.8	3.0	2.0	5.5	2.2	2.8	2.5	2.5	3.0	2.8	1.0	1.1	2.4	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	0.38	1.29	0.92	2.36	0.92	1.20	0.95	1.22	1.17	1.17	0.47	0.44	1.03	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	8.7	8.9	7.6	7.5	8.4	7.8	6.6	6.8	9.8	9.4	11.9	10.5	8.7	
EFFLUENT (MG/L)	0.8	0.9	0.9	0.6	0.5	0.5	0.5	0.4	0.4	0.5	0.6	0.6	0.6	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	0.38	0.38	0.41	0.25	0.21	0.21	0.19	0.19	0.15	0.21	0.28	0.24	0.26	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NO REMEDIAL MEASURES REPORTED

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : ST CATHARINES
PLANT : PORT DALHOUSIE WPCP
WORKS NUMBER : 1200013?7
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL CONTINUOUS
:
DESIGN CAPACITY : 61.37 (1000 M3)

REGION : WEST CENTRAL
DISTRICT : NIAGARA, REG. MUN.
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : LAKE ONTARIO
MINOR BASIN : ONTARIO
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 60,430

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	41.20	40.30	48.80	50.30	57.20	51.20	40.40	38.30	38.50	41.30	51.50	41.50	45.04	
BODS														
INFLUENT (MG/L)	133.0	76.0	104.0	56.0	54.0	51.0	50.0	139.0	73.0	282.0	53.0	79.0	95.8	
EFFLUENT (MG/L)	25.0	12.1	11.4	8.5	5.6	13.0	13.1	2.4	49.6	2.8	9.5	18.3	14.3	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	1030.00	487.63	556.32	427.55	320.32	665.60	529.24	91.92	1909.60	115.64	489.25	759.45	644.07	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	122.0	145.0	115.0	142.0	114.0	110.0	107.0	130.0	145.0	148.0	126.0	121.0	127.1	
EFFLUENT (MG/L)	11.3	10.0	11.3	10.0	9.2	9.5	107.0	8.8	8.0	94.1	12.2	9.5	25.1*	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	465.56	403.00	551.44	503.00	526.24	486.40	4322.80	337.04	308.00	3886.33	628.30	394.25	1130.50	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	3.5	4.0	5.1	3.0	3.4	3.5	3.5	3.9	3.5	3.9	3.0	4.0	3.7	
EFFLUENT (MG/L)	0.7	0.7	0.7	0.5	0.4	0.6	0.8	0.7	1.9*	0.7	0.5	0.7	0.7	1
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	28.84	28.21	34.16	25.15	22.88	30.72	32.32	26.81	73.15	28.91	25.75	29.05	31.53	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	NO
TP	1.0 MG/L	NO

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES

	START DATE	END DATE	ANTICIPATED COMPLIANCE
EQUIPMENT/MAINTENANCE - EXISTING EQUIPMENT BEING MODIFIED/UPGRADED	1989	1990	1991
FACILITY EXPANSION/UPGRADING REMEDIAL MEASURES BEING IMPLEMENTED IN PHASES			
FACILITY EXPANSION/UPGRADING - UPGRADING SECONDARY CLARIFIERS			
FACILITY EXPANSION/UPGRADING - UPGRADING DISINFECTION PROCESS			
FACILITY EXPANSION/UPGRADING - UPGRADING HEADWORKS			

1989 CERTIFICATE OF APPROVAL ASSESSMENT

MUNICIPALITY : ST CATHARINES
PLANT : PORT WELLER WPCP
WORKS NUMBER : 120001318
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL-CONTINUOUS
:
DESIGN CAPACITY : 37.50 (1000 M3)

REGION : WEST CENTRAL
DISTRICT : NIAGARA, REG. MUN.
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : PORT WELLER HARBOUR
MINOR BASIN : ONTARIO
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 75,690

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	40.00	40.50	49.86	40.86	57.10	49.73	48.50	43.10	40.10	41.90	47.40	41.00	45.00	
BOD5														
INFLUENT (MG/L)	99.0	97.0	96.0	41.0	ND	66.0	87.0	134.0	109.0	128.0	156.0	518.0	139.2	
EFFLUENT (MG/L)	11.3	14.3	43.5	38.0	ND	7.0	53.7	15.6	24.3	18.4	49.0	14.2	26.3*	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	452.00	579.15	2168.91	1552.68	ND	348.11	2604.45	672.36	974.43	770.96	2322.60	582.20	1183.50	
LOADING LIMIT (KG/D)														
SUSPENDED SOLIDS														
INFLUENT (MG/L)	232.0	260.0	243.0	180.0	213.0	199.0	236.0	242.0	284.0	320.0	223.0	257.0	240.8	
EFFLUENT (MG/L)	16.3	15.8	15.9	19.0	22.5	10.6	11.3	11.6	12.5	14.8	21.2	14.8	15.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	652.00	639.90	792.77	776.34	1284.75	527.13	548.05	499.96	501.25	620.12	1004.88	606.80	697.50	
LOADING LIMIT (KG/D)														
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.3	5.3	7.4	3.9	7.9	4.8	5.7	7.0	4.6	5.4	4.1	7.8	5.9	
EFFLUENT (MG/L)	0.9	0.6	0.8	1.0	0.6	0.6	1.0	0.8	0.8	0.7	0.7	0.7	0.8	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	36.00	24.30	39.88	40.86	34.26	29.83	48.50	34.48	32.08	29.33	33.18	28.70	36.00	
LOADING LIMIT (KG/D)														

SUMMARY

PARM	CRITERIA	LOADING	COMPLIES WITH CONC	COMPLIES WITH LOADING
BOD	25.0 MG/L	NA	NO	NA
SS	25.0 MG/L	NA	YES	NA
TP	1.0 MG/L	NA	YES	NA

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES	START DATE	END DATE	ANTICIPATED COMPLIANCE
COLLECTION SYSTEM - SEWAGE UPGRADE UNDERWAY	1989	1990/10	1991
EQUIPMENT/MAINTENANCE - EXISTING EQUIPMENT BEING MODIFIED/UPGRADED			
FACILITY EXPANSION/UPGRADING - REMEDIAL MEASURES BEING IMPLEMENTED IN PHASES			
FACILITY EXPANSION/UPGRADING - UPGRADING SECONDARY CLARIFIERS			
FACILITY EXPANSION/UPGRADING - UPGRADING HEADWORKS			

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : ST CATHARINES
PLANT : PORT WELLER WPCP
WORKS NUMBER : 120001518
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL CONTINUOUS
:
DESIGN CAPACITY : 37.50 (1000 M3)

REGION : WEST CENTRAL
DISTRICT : NIAGARA, REG. MUN.
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : PORT WELLER HARBOUR
MINOR BASIN : ONTARIO
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 75,690

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	40.00	40.50	49.86	40.86	57.10	49.73	48.50	43.10	40.10	41.90	47.40	41.00	45.00	
BOD														
INFLUENT (MG/L)	99.0	97.0	96.0	41.0	ND	66.0	87.0	134.0	109.0	128.0	156.0	518.0	139.2	
EFFLUENT (MG/L)	11.3	14.3	43.5	38.0	ND	7.0	53.7	15.6	24.3	18.4	49.0	14.2	26.3*	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	452.00	579.15	2168.91	1552.68	ND	348.11	2604.45	672.36	974.43	770.96	2322.60	582.20	1183.50	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	232.0	260.0	243.0	180.0	213.0	199.0	236.0	242.0	284.0	320.0	223.0	257.0	240.8	
EFFLUENT (MG/L)	16.3	15.8	15.9	19.0	22.5	10.6	11.3	11.6	12.5	14.8	21.2	14.8	15.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	652.00	639.90	792.77	776.34	1284.75	527.13	548.05	499.96	501.25	620.12	1004.88	606.80	697.50	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.3	5.3	7.4	3.9	7.9	4.8	5.7	7.0	4.6	5.4	4.1	7.8	5.9	
EFFLUENT (MG/L)	0.9	0.6	0.8	1.0	0.6	0.6	1.0	0.8	0.8	0.7	0.7	0.7	0.8	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	36.00	24.30	39.88	40.86	34.26	29.83	48.50	34.48	32.08	29.33	33.18	28.70	36.00	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	NO
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (E.G. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES	START DATE	END DATE	ANTICIPATED COMPLIANCE
COLLECTION SYSTEM - SEWAGE UPGRADE UNDERWAY	1989	1990/10	1991
EQUIPMENT/MAINTENANCE - EXISTING EQUIPMENT BEING MODIFIED/UPGRADED			
FACILITY EXPANSION/UPGRADING - REMEDIAL MEASURES BEING IMPLEMENTED IN PHASES			
FACILITY EXPANSION/UPGRADING - UPGRADING SECONDARY CLARIFIERS			
FACILITY EXPANSION/UPGRADING - UPGRADING HEADWORKS			

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : WATERLOO
PLANT : WATERLOO WPCP
WORKS NUMBER : 110000793
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL-CONTINUOUS
:
DESIGN CAPACITY : 72.73 (1000 M3)

REGION : WEST CENTRAL
DISTRICT :
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : GRAND RIVER
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 66,627

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	42.22	38.37	42.16	39.21	37.14	40.10	31.69	33.25	34.08	35.95	37.54	33.38	37.09	
BOD5														
INFLUENT (MG/L)	177.0	198.0	154.0	180.0	302.0	ND	ND	ND	ND	202.0	229.0	240.0	210.3	
EFFLUENT (MG/L)	11.1	13.6	17.0	18.0	8.0	6.0	6.0	10.0	9.2	7.9	11.9	11.7	10.9	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	468.64	521.83	716.72	705.78	297.12	240.60	190.14	332.50	313.53	284.00	446.72	390.54	404.28	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	461.0	351.0	377.0	307.0	495.0	ND	ND	ND	ND	268.0	421.0	262.0	367.8	
EFFLUENT (MG/L)	25.9	26.6	35.0	39.0	14.0	9.0	10.0	16.0	19.5	15.3	22.5	18.1	20.9	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	1093.49	1020.64	1475.60	1529.19	519.96	360.90	316.90	532.00	664.56	550.03	844.65	604.17	775.18	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.4	6.2	6.6	5.5	9.0	ND	ND	ND	ND	6.7	6.9	8.4	7.0	
EFFLUENT (MG/L)	1.3*	1.1*	1.5*	1.4*	0.7	0.8	1.0	0.7	1.0	0.8	1.1*	0.8	1.0	5
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	54.88	42.20	63.24	54.89	25.99	32.08	31.69	23.27	34.08	28.76	41.29	26.70	37.09	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	NO

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES

FACILITY EXPANSION/UPGRADING - CONSTRUCTION COMPLETE

START DATE	END DATE	ANTICIPATED COMPLIANCE
	1989/08	1990

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : WELLAND
PLANT : WELLAND WPCP
WORKS NUMBER : 1200014339
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL-CONTINUOUS
:
DESIGN CAPACITY : 45.46 (1000 M3)

REGION : WEST CENTRAL
DISTRICT : NIAGARA, REG. MUN.
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : WELLAND RIVER
MINOR BASIN : ONTARIO
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 47,205

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	32.56	28.46	42.49	40.22	41.91	40.31	32.33	25.25	38.54	30.61	42.37	29.08	35.34	
BOD5														
INFLUENT (MG/L)	109.0	53.0	31.0	64.0	61.0	42.0	77.0	134.0	142.0	101.0	97.0	223.0	94.5	
EFFLUENT (MG/L)	14.9	12.5	8.9	9.7	11.8	12.3	13.3	29.5	33.7	59.5	14.5	13.0	19.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	485.14	355.75	378.16	390.13	494.53	495.81	429.98	744.87	1298.79	1821.29	614.36	378.04	689.13	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	168.0	159.0	132.0	189.0	190.0	119.0	131.0	193.0	298.0	205.0	138.0	326.0	187.3	
EFFLUENT (MG/L)	13.9	11.3	11.0	12.4	21.5	19.4	12.4	17.6	28.4	56.6	29.0	25.1	21.6	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	452.58	321.59	467.39	498.72	901.06	782.01	400.89	444.40	1094.53	1732.52	1228.73	729.90	763.34	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	4.0	4.8	2.6	6.2	5.2	3.3	6.7	5.1	11.7	9.7	5.9	5.2	5.9	
EFFLUENT (MG/L)	0.6	1.0	3.4*	0.2	0.5	0.7	0.6	0.6	0.7	1.5*	1.0	1.0	1.0	2
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	19.53	28.46	144.46	8.04	20.95	28.21	19.39	15.15	26.97	45.91	42.37	29.08	35.34	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	NO

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES

	START DATE	END DATE	ANTICIPATED COMPLIANCE
FACILITY EXPANSION/UPGRADING - UPGRADING BIOLOGICAL PROCESS	1988	1990	1991
FACILITY EXPANSION/UPGRADING - UPGRADING SECONDARY CLARIFIERS	1988	1990	1991
FACILITY EXPANSION/UPGRADING - UPGRADING PRIMARY CLARIFIERS	1988	1990	1991
FACILITY EXPANSION/UPGRADING - UPGRADING DISINFECTION PROCESS			
FACILITY EXPANSION/UPGRADING - NITRIFICATION ADDED	1988	1990	1991
FACILITY EXPANSION/UPGRADING - CHLORINATION ADDED	1988	1990	1991

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : WELLESLEY
PLANT : WELLESLEY WPCP
WORKS NUMBER : 110001578
TREATMENT : EXTENDED AERATION
: PHOSPHORUS REMOVAL-CONTINUOUS
:
DESIGN CAPACITY : 0.50 (1000 M3)

REGION : WEST CENTRAL
DISTRICT :
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : NITH RIVER
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 950

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.49	0.31	0.43	0.48	0.34	0.35	0.21	0.21	0.24	0.29	0.45	0.35	0.35	
BOD5														
INFLUENT (MG/L)	147.0	135.0	202.0	202.0	200.0	49.0	174.0	110.0	185.0	357.0	110.0	110.0	165.1	
EFFLUENT (MG/L)	2.2	2.6	1.4	1.3	1.8	0.5	3.3	0.5	0.5	2.7	0.8	0.4	1.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	1.07	0.80	0.60	0.62	0.61	0.17	0.69	0.10	0.12	0.78	0.36	0.14	0.53	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	136.0	129.0	330.0	128.0	182.0	133.0	183.0	179.0	222.0	394.0	140.0	176.0	194.3	
EFFLUENT (MG/L)	5.5	3.9	6.0	4.9	5.5	3.5	3.2	4.7	5.5	5.0	4.7	4.7	4.8	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	2.69	1.20	2.58	2.35	1.87	1.22	0.67	0.98	1.32	1.45	2.11	1.64	1.68	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.0	5.4	9.4	4.5	7.1	4.2	7.2	6.1	6.1	9.2	4.7	6.2	6.3	
EFFLUENT (MG/L)	0.3	0.4	0.3	0.7	0.5	0.6	0.6	0.8	0.9	0.1	0.7	0.4	0.5	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	0.14	0.12	0.12	0.33	0.17	0.21	0.12	0.16	0.21	0.02	0.31	0.14	0.18	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : WEST LINCOLN
PLANT : SMITHVILLE LAGOON
WORKS NUMBER : 120001229
TREATMENT : CONVENTIONAL LAGOON SEASONAL
:
:
DESIGN CAPACITY : 1.56 (1000 M3)

REGION : WEST CENTRAL
DISTRICT : NIAGARA, REG. MUN.
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : TWENTY MILE CREEK
MINOR BASIN : ONTARIO
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 1,980

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.90	0.70	1.15	1.12	0.22	ND	ND	ND	ND	ND	ND	ND	0.82	
LAGOON DISCHARGE	ND	ND	18.18	105.02	50.01	ND	ND	ND	ND	ND	ND	ND	57.74	
BOD5														
INFLUENT (MG/L)	98.0	201.0	150.0	91.0	81.0	ND	ND	ND	ND	ND	ND	ND	124.2	
EFFLUENT (MG/L)	ND	ND	ND	16.5	19.6	ND	ND	ND	ND	ND	ND	ND	18.1	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	18.48	4.31	ND	ND	ND	ND	ND	ND	ND	14.84	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	91.0	269.0	143.0	89.0	117.0	ND	ND	ND	ND	ND	ND	ND	141.8	
EFFLUENT (MG/L)	ND	ND	ND	17.0	56.2	ND	ND	ND	ND	ND	ND	ND	36.6	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	19.04	12.36	ND	ND	ND	ND	ND	ND	ND	30.01	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	5.1	8.7	7.0	5.0	4.1	ND	ND	ND	ND	ND	ND	ND	6.0	
EFFLUENT (MG/L)	ND	ND	ND	5.3	4.8	ND	ND	ND	ND	ND	ND	ND	5.1	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	5.93	1.05	ND	ND	ND	ND	ND	ND	ND	4.18	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	NA	NA

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES

	START DATE	END DATE	ANTICIPATED COMPLIANCE
OPERATIONAL/PROCESS - PHASING OUT EXISTING FACILITY			

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : WILMOT
PLANT : BADEN WPCP
WORKS NUMBER : 110001710
TREATMENT : EXTENDED AERATION
: PHOSPHORUS REMOVAL-CONTINUOUS
:
DESIGN CAPACITY : 0.92 (1000 M3)

REGION : WEST CENTRAL
DISTRICT :
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : BADEN CREEK
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 1,152

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.75	0.60	0.77	0.82	0.75	0.80	0.53	0.49	0.52	0.56	0.75	0.55	0.66	
BOD5														
INFLUENT (MG/L)	206.0	400.0	229.0	230.0	363.0	581.0	359.0	332.0	463.0	237.0	350.0	482.0	352.7	
EFFLUENT (MG/L)	3.9	2.0	8.5	2.7	5.4	10.9	9.5	1.4	1.3	1.1	1.8	2.2	4.2	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	2.92	1.20	6.54	2.21	4.05	8.72	5.03	0.68	0.67	0.61	1.35	1.21	2.77	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	206.0	1,227.0	284.0	1,080.0	500.0	341.0	383.0	494.0	508.0	272.0	419.0	617.0	527.6	
EFFLUENT (MG/L)	5.7	7.5	9.8	18.0	11.0	16.3	28.9	4.3	4.8	3.4	5.8	5.4	10.1	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	4.27	4.50	7.54	14.76	8.25	13.04	15.31	2.10	2.49	1.90	4.35	2.97	6.67	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	8.5	9.6	6.8	6.9	10.5	11.3	10.5	12.5	9.9	9.9	8.8	14.2	10.0	
EFFLUENT (MG/L)	0.6	0.4	0.4	0.5	0.4	0.7	0.7	0.6	0.5	0.7	0.7	0.6	0.6	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	0.45	0.24	0.30	0.41	0.30	0.56	0.37	0.29	0.26	0.39	0.52	0.33	0.40	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : WILMOT
PLANT : NEW HAMBURG LAGOON
WORKS NUMBER : 110000506
TREATMENT : AERATED CELL PLUS LAGOON
: EFFLUENT POLISHING
: CONTINUOUS DISCHARGE
DESIGN CAPACITY : 2.72 (1000 M3)

REGION : WEST CENTRAL
DISTRICT :
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : NITH RIVER
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 3,978

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.55	1.29	1.57	1.82	1.52	1.65	1.16	1.13	1.11	1.17	1.52	1.20	1.39	
LAGOON DISCHARGE	ND	ND	ND	57.23	65.40	43.90	30.13	32.48	36.53	27.59	42.33	20.23	39.54	
BOD5														
INFLUENT (MG/L)	112.0	164.0	103.0	176.0	104.0	141.0	112.0	176.0	143.0	164.0	128.0	172.0	141.3	
EFFLUENT (MG/L)	ND	ND	ND	3.2	1.6	0.7	1.1	1.0	0.3	2.6	1.9	0.9	1.5	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	5.82	2.43	1.15	1.27	1.13	0.33	3.04	2.88	1.08	2.09	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	135.0	233.0	213.0	240.0	245.0	180.0	178.0	211.0	233.0	183.0	154.0	259.0	205.3	
EFFLUENT (MG/L)	ND	ND	ND	3.8	3.0	4.8	3.0	3.8	4.5	1.7	1.5	3.3	3.3	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	6.91	4.56	7.92	3.48	4.29	4.99	1.98	2.28	3.96	4.59	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	14.4	10.0	7.2	8.7	6.3	8.5	10.0	9.9	16.0	14.3	9.1	19.5	11.2	
EFFLUENT (MG/L)	ND	ND	ND	0.5	0.3	0.4	0.5	0.4	0.3	0.5	0.6	0.6	0.5	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	0.91	0.45	0.66	0.58	0.45	0.33	0.58	0.91	0.72	0.70	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	NA	NA

NO REMEDIAL MEASURES REPORTED

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

1989 CERTIFICATE OF APPROVAL ASSESSMENT

MUNICIPALITY : WOOLWICH
PLANT : ELMIRA WPCP (COMBINED FLOW)
WORKS NUMBER : 110000150
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL-CONTINUOUS
:
DESIGN CAPACITY : 4.54 (1000 M3)

REGION : WEST CENTRAL
DISTRICT :
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : CANAGAGIGUE CREEK
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 7,090

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	5.37	3.83	5.38	5.57	5.67	6.59	5.66	5.08	4.96	4.01	4.75	3.07	5.00	
BOD5														
INFLUENT (MG/L)	241.0	210.0	350.0	264.0	249.0	368.0	215.0	298.0	322.0	311.0	209.0	192.0	269.1	
EFFLUENT (MG/L)	2.6	3.3	4.0	3.1	2.6	2.9	0.8	2.8	1.8	5.5	6.4	3.6	3.3	
CONCENTRATION LIMIT (MG/L)													7.5	
LOADING (KG/D)	13.96	12.63	21.52	17.26	14.74	19.11	4.52	14.22	8.92	22.05	30.40	11.05	16.50	
LOADING LIMIT (KG/D)													34.02	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	232.0	222.0	359.0	260.0	346.0	497.0	279.0	352.0	419.0	218.0	99.0	110.0	282.8	
EFFLUENT (MG/L)	10.2	10.2	11.1	9.0	16.1	10.6	9.8	7.2	11.2	6.8	8.2	5.6	9.7	
CONCENTRATION LIMIT (MG/L)													15.0	
LOADING (KG/D)	54.77	39.06	59.71	50.13	91.28	69.85	55.46	36.57	55.55	27.26	38.95	17.19	48.50	
LOADING LIMIT (KG/D)													68.04	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.0	5.4	8.5	5.6	5.7	26.1	ND	10.2	9.4	7.4	ND	6.5	9.1	
EFFLUENT (MG/L)	0.3	0.5	0.5	0.3	0.6	0.7	1.3	0.5	0.4	0.8	1.2	1.2	0.7	
CONCENTRATION LIMIT (MG/L)													1.0	
LOADING (KG/D)	1.61	1.91	2.69	1.67	3.40	4.61	7.35	2.54	1.98	3.20	5.70	3.68	3.50	
LOADING LIMIT (KG/D)													4.53	

SUMMARY

PARM	CRITERIA	LOADING	COMPLIES WITH CONC	COMPLIES WITH LOADING
BOD	7.5 MG/L	34.02 KG/D	YES	YES
SS	15.0 MG/L	68.04 KG/D	YES	YES
TP	1.0 MG/L	4.53 KG/D	YES	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED ANNUALLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES

	START DATE	END DATE	ANTICIPATED COMPLIANCE
FACILITY EXPANSION/UPGRADING - ENGINEERING STUDY PHASE		1990/09	1990
FACILITY EXPANSION/UPGRADING - REMEDIAL MEASURES BEING IMPLEMENTED IN PHASES			

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : WOOLWICH
PLANT : ELMIRA WPCP (COMBINED FLOW)
WORKS NUMBER : 110000150
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL CONTINUOUS
:
DESIGN CAPACITY : 4.54 (1000 M3)

REGION : WEST CENTRAL
DISTRICT :
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : CANAGAGIGUE CREEK
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 7,090

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	5.37	3.83	5.38	5.57	5.67	6.59	5.66	5.08	4.96	4.01	4.75	3.07	5.00	
BOD5														
INFLUENT (MG/L)	241.0	210.0	350.0	264.0	249.0	368.0	215.0	298.0	322.0	311.0	209.0	192.0	269.1	
EFFLUENT (MG/L)	2.6	3.3	4.0	3.1	2.6	2.9	0.8	2.8	1.8	5.5	6.4	3.6	3.3	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	13.96	12.63	21.52	17.26	14.74	19.11	4.52	14.22	8.92	22.05	30.40	11.05	16.50	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	232.0	222.0	359.0	260.0	346.0	497.0	279.0	352.0	419.0	218.0	99.0	110.0	282.8	
EFFLUENT (MG/L)	10.2	10.2	11.1	9.0	16.1	10.6	9.8	7.2	11.2	6.8	8.2	5.6	9.7	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	54.77	39.06	59.71	50.13	91.28	69.85	55.46	36.57	55.55	27.26	38.95	17.19	48.50	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.0	5.4	8.5	5.6	5.7	26.1	ND	10.2	9.4	7.4	ND	6.5	9.1	
EFFLUENT (MG/L)	0.3	0.5	0.5	0.3	0.6	0.7	1.3*	0.5	0.4	0.8	1.2*	1.2*	0.7	3
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	1.61	1.91	2.69	1.67	3.40	4.61	7.35	2.54	1.98	3.20	5.70	3.68	3.50	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	NO

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED ANNUALLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES

	START DATE	END DATE	ANTICIPATED COMPLIANCE
FACILITY EXPANSION/UPGRADING - ENGINEERING STUDY PHASE		1990/09	1990
FACILITY EXPANSION/UPGRADING - REMEDIAL MEASURES BEING IMPLEMENTED IN PHASES			

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : WOOLWICH
PLANT : ST.JACOBS PV WPCP
WORKS NUMBER : 110001211
TREATMENT : OXIDATION DITCH
: PHOSPHORUS REMOVAL-CONTINUOUS
:
DESIGN CAPACITY : 0.95 (1000 M3)

REGION : WEST CENTRAL
DISTRICT :
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : CONESTOGO RIVER
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 1,266

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.83	0.67	0.90	0.90	0.71	0.78	0.55	0.70	0.66	0.82	1.05	0.89	0.79	
BOD5														
INFLUENT (MG/L)	70.0	162.0	134.0	66.0	203.0	197.0	86.0	195.0	307.0	197.0	433.0	509.0	213.3	
EFFLUENT (MG/L)	4.0	4.5	3.3	4.7	5.4	6.6	1.9	10.5	1.5	5.0	6.4	29.1	6.9	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	3.32	3.01	2.97	4.23	3.83	5.14	1.04	7.35	0.99	4.10	6.72	25.89	5.45	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	229.0	161.0	171.0	182.0	209.0	179.0	193.0	225.0	232.0	307.0	367.0	210.0	222.1	
EFFLUENT (MG/L)	12.1	10.1	9.1	14.8	24.9	29.7	9.8	13.7	13.3	17.6	47.9	47.1	20.8	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	10.04	6.76	8.19	13.32	17.67	23.16	5.39	9.59	8.77	14.43	50.29	41.91	16.43	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.7	4.7	5.8	4.0	4.8	5.9	6.8	8.9	7.5	6.9	7.8	7.4	6.4	
EFFLUENT (MG/L)	0.5	0.4	0.5	0.5	0.6	2.3*	0.8	1.0	0.7	0.9	0.9	1.5*	0.9	2
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	0.41	0.26	0.45	0.45	0.42	1.79	0.44	0.70	0.46	0.73	0.94	1.33	0.71	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	NO

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES	START DATE	END DATE	ANTICIPATED COMPLIANCE
FACILITY EXPANSION/UPGRADING - ENGINEERING STUDY PHASE		1993/05	1994

Central Region

3

Ministry of the Environment

Ontario

REGIONAL OFFICE

Toronto
7 Overlea Blvd.
M4E 1A8
(416) 424-3000

DISTRICT OFFICES

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(7050 726-1730

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Peterborough
139 George St. North
K9J 3G6
(705) 743-2792

York-Durham
7 Overlea Blvd.
M4H 1E8
(416) 467-3009

CENTRAL SUMMARY - 1989

Treatment Type	Number			Design Capacity (1000M3/D)		
	Min	Mun	Tot	Ministry	Municipal	Total
Conventional Activated Sludge	3	26	29	399.14	2,139.71	2,538.85
Contact Stabilization	1	2	3	1.05	4.50	5.55
Extended Aeration	11	13	24	35.05	35.11	70.16
High Rate	0	1	1	-	9.09	9.09
Oxidation Ditch	3	0	3	2.79	-	2.79
Communal Septic Tank	0	1	1	-	0.09	0.09
Convent. Lagoon Continuous	0	4	4	-	19.15	19.15
Conventional Lagoon Seasonal	1	7	8	0.58	11.25	11.83
Lagoon and Spray	1	0	1	0.61	-	0.61
Aerated Cell Plus Lagoon	0	2	2	-	4.91	4.91
Exfiltration Lagoon	1	0	1	1.36	-	1.36
TOTALS	21	56	77	440.58	2,223.81	2,664.39

1000M3/D: Thousands of cubic meters per day
ADF: Average Daily Flow

CENTRAL SUMMARY - 1989

Treatment Type	Number			Average Daily Flow (1000M3/D)		
	Min	Mun	Tot	Ministry	Municipal	Total
Conventional Activated Sludge	3	26	29	350.28	1,905.15	2,255.43
Contact Stabilization	1	2	3	0.78	4.52	5.30
Extended Aeration	11	13	24	15.46	18.79	34.25
High Rate	0	1	1	0.00	5.30	5.30
Oxidation Ditch	3	0	3	2.44	0.00	2.44
Communal Septic Tank	0	1	1	0.00	0.12	0.12
Convent. Lagoon Continuous	0	4	4	0.00	13.78	13.78
Conventional Lagoon Seasonal	1	7	8	0.82	8.25	9.07
Lagoon and Spray	1	0	1	0.32	0.00	0.32
Aerated Cell Plus Lagoon	0	2	2	0.00	4.48	4.48
Exfiltration Lagoon	1	0	1	0.80	0.00	0.80
TOTALS	21	56	77	370.90	1,960.39	1,331.27

1000M3/D: Thousands of cubic meters per day
ADF: Average Daily Flow

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : ALLISTON
PLANT : ALLISTON WPCP
WORKS NUMBER : 1100010[illegible]
TREATMENT : EXTENDED AERATION

DESIGN CAPACITY : 5.50 (1000 M3)

REGION : CENTRAL
DISTRICT : SIMCOE
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : BOYNE RIVER
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 4,674

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	3.33	3.12	3.36	3.28	3.46	3.65	3.45	3.76	3.75	3.56	3.70	3.20	3.47	
BOD														
INFLUENT (MG/L)	130.5	181.0	199.5	123.0	138.0	138.5	114.0	110.5	125.5	156.0	160.0	275.0	151.0	
EFFLUENT (MG/L)	27.1	19.5	36.5	26.4	16.3	13.7	9.1	18.0	6.1	5.7	31.7	19.1	19.1	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	90.24	60.84	122.64	86.59	56.39	50.00	31.39	67.68	22.87	20.29	117.29	61.12	66.28	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	107.0	123.5	191.5	114.5	118.5	152.0	165.5	126.0	159.0	189.0	143.0	249.0	151.5	
EFFLUENT (MG/L)	26.5	21.8	22.5	22.5	12.5	10.2	10.8	24.0	10.3	15.6	37.2	19.2	19.4	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	88.24	68.01	75.60	73.80	43.25	37.23	37.26	90.24	38.62	55.53	137.64	61.44	67.32	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	8.0	10.1	9.8	6.7	8.2	7.1	6.0	9.8	7.5	8.3	10.1	11.3	8.6	
EFFLUENT (MG/L)	6.2	5.7	6.4	5.4	5.6	5.5	5.2	4.6	5.8	6.6	6.3	6.6	5.8	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	20.64	17.78	21.50	17.71	19.37	20.07	17.94	17.29	21.75	23.49	23.31	21.12	20.13	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	NA	NA

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (E.G. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES	START DATE	END DATE	ANTICIPATED COMPLIANCE
FACILITY EXPANSION/UPGRADING - CONSTRUCTION INITIATED	1988/08	1990/07	1990/08

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : ANSON HINDON MINDEN
PLANT : MINDEN WPCP
WORKS NUMBER : 110002390
TREATMENT : EXTENDED AERATION
: PHOSPHORUS REMOVAL-CONTINUOUS
: EFFLUENT POLISHING
DESIGN CAPACITY : 0.94 (1000 M3)

REGION : CENTRAL
DISTRICT : HALIBURTON
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : GULL RIVER
MINOR BASIN : ONTARIO
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 984

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.58	0.57	0.61	0.69	0.92	0.62	0.58	0.60	0.59	0.64	0.71	0.76	0.66	
BOD5														
INFLUENT (MG/L)	223.0	125.0	134.0	64.0	83.0	124.0	113.0	39.0	82.0	156.0	102.0	94.0	111.6	
EFFLUENT (MG/L)	1.8	0.5	1.8	0.5	0.8	0.5	0.8	0.2	0.2	0.2	0.2	0.2	0.6	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	1.04	0.28	1.09	0.34	0.73	0.31	0.46	0.12	0.11	0.12	0.14	0.15	0.40	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	148.0	209.0	228.0	75.0	87.0	213.0	166.0	78.0	112.0	203.0	127.0	116.0	146.8	
EFFLUENT (MG/L)	1.5	7.5	9.5	2.0	19.8	1.8	2.8	2.8	2.5	1.6	0.5	0.8	4.4	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	0.87	4.27	5.79	1.38	18.21	1.11	1.62	1.68	1.47	1.02	0.35	0.60	2.90	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	9.7	5.6	6.2	3.2	4.4	5.5	5.7	3.2	5.3	6.0	4.8	4.9	5.4	
EFFLUENT (MG/L)	0.2	0.2	0.3	0.1	0.1	0.2	0.9	0.2	0.4	0.2	0.2	0.1	0.3	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	0.11	0.11	0.18	0.06	0.09	0.12	0.52	0.12	0.23	0.12	0.14	0.07	0.20	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NO REMEDIAL MEASURES REPORTED

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

1989 CERTIFICATE OF APPROVAL ASSESSMENT

MUNICIPALITY : BARRIE
PLANT : BARRIE WPCP
WORKS NUMBER : 1200005/8
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL CONTINUOUS
:
DESIGN CAPACITY : 27.27 (1000 M3)

REGION : CENTRAL
DISTRICT : SIMCOE
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : KEMPENFELT BAY L. SIMCOE
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 50,000

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	27.98	28.59	30.94	32.95	34.21	35.51	31.93	32.53	34.58	32.60	32.68	32.97	32.29	
BOD5														
INFLUENT (MG/L)	277.0	200.0	211.0	207.0	184.0	206.0	131.0	176.0	158.0	200.0	187.0	135.0	189.3	
EFFLUENT (MG/L)	3.4	4.7	6.5	3.3	5.5	20.4	9.1	7.6	10.8	5.5	4.6	7.3	7.4	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	95.13	134.37	201.11	108.73	188.15	724.40	290.56	247.22	373.46	179.30	150.32	240.68	238.95	
LOADING LIMIT (KG/D)														
SUSPENDED SOLIDS														
INFLUENT (MG/L)	278.0	269.0	266.0	219.0	233.0	265.0	192.0	196.0	196.0	203.0	232.0	201.0	229.2	
EFFLUENT (MG/L)	4.6	4.8	6.7	5.2	3.6	20.4	13.0	8.5	9.8	8.2	8.4	12.7	8.8	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	128.70	137.23	207.29	171.34	123.15	724.40	415.09	276.50	338.88	267.32	274.51	418.71	284.15	
LOADING LIMIT (KG/D)														
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.8	6.3	6.7	5.4	5.3	5.2	5.5	5.1	4.5	6.0	5.6	2.9	5.4	
EFFLUENT (MG/L)	0.2	0.2	0.2	0.2	0.1	0.9	0.5	0.4	0.3	0.3	0.2	0.3	0.3	
CONCENTRATION LIMIT (MG/L)													0.3	
LOADING (KG/D)	5.59	5.71	6.18	6.59	3.42	31.95	15.96	13.01	10.37	9.78	6.53	9.89	9.69	
LOADING LIMIT (KG/D)													13.91	

SUMMARY

PARM	CRITERIA	LOADING	COMPLIES WITH CONC	COMPLIES WITH LOADING
BOD	NA	NA	NA	NA
SS	NA	NA	NA	NA
TP	0.3 MG/L	13.91 KG/D	YES	YES

NOTE:
BOD - HAS NO CRITERIA
SS - HAS NO CRITERIA
TP - ASSESSED ANNUALLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : BARRIE
PLANT : BARRIE WPCP
WORKS NUMBER : 120000578
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL-CONTINUOUS
:
DESIGN CAPACITY : 27.27 (1000 M3)

REGION : CENTRAL
DISTRICT : SIMCOE
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : KEMPENFELT BAY L. SIMCOE
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 50,000

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	27.98	28.59	30.94	32.95	34.21	35.51	31.93	32.53	34.58	32.60	32.68	32.97	32.29	
BOD5														
INFLUENT (MG/L)	277.0	200.0	211.0	207.0	184.0	206.0	131.0	176.0	158.0	200.0	187.0	135.0	189.3	
EFFLUENT (MG/L)	3.4	4.7	6.5	3.3	5.5	20.4	9.1	7.6	10.8	5.5	4.6	7.3	7.4	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	95.13	134.37	201.11	108.73	188.15	724.40	290.56	247.22	373.46	179.30	150.32	240.68	238.95	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	278.0	269.0	266.0	219.0	233.0	265.0	192.0	196.0	196.0	203.0	232.0	201.0	229.2	
EFFLUENT (MG/L)	4.6	4.8	6.7	5.2	3.6	20.4	13.0	8.5	9.8	8.2	8.4	12.7	8.8	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	128.70	137.23	207.29	171.34	123.15	724.40	415.09	276.50	338.88	267.32	274.51	418.71	284.15	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.8	6.3	6.7	5.4	5.3	5.2	5.5	5.1	4.5	6.0	5.6	2.9	5.4	
EFFLUENT (MG/L)	0.2	0.2	0.2	0.2	0.1	0.9	0.5	0.4	0.3	0.3	0.2	0.3	0.3	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	5.59	5.71	6.18	6.59	3.42	31.95	15.96	13.01	10.37	9.78	6.53	9.89	9.69	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NO REMEDIAL MEASURES REPORTED

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED ANNUALLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : BELTON
PLANT : BELTON LAGOON
WORKS NUMBER : 110000917
TREATMENT : EXFILTRATION LAGOON
:
:
DESIGN CAPACITY : 1.36 (1000 M3)

REGION : CENTRAL
DISTRICT : SIMCOE
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : NO DISC.TO SURFACE WATER
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 2,105

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.69	0.61	0.61	0.78	0.89	0.82	0.73	0.78	0.86	0.84	1.08	0.87	0.80	
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BOD5														
INFLUENT (MG/L)	120.0	171.5	221.5	46.5	133.5	103.5	130.0	201.0	202.5	127.5	138.0	120.5	143.0	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
SUSPENDED SOLIDS														
INFLUENT (MG/L)	228.5	125.0	468.0	131.5	293.0	107.5	140.0	171.0	152.0	129.0	200.0	144.5	190.8	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	7.3	8.6	9.8	7.6	4.2	4.6	7.9	6.7	6.5	5.8	4.1	5.5	6.6	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	NA	NO DIRECT DISCHARGE
SS	NA	NO DIRECT DISCHARGE
TP	NA	NO DIRECT DISCHARGE

NOTE:
BOD - HAS NO CRITERIA
SS - HAS NO CRITERIA
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : BICROFT
PLANT : CARDIFF LAGOON
WORKS NUMBER : 120001032
TREATMENT : CONVENTIONAL LAGOON CONTINUOUS
:
:
DESIGN CAPACITY : 0.45 (1000 M3)

REGION : CENTRAL
DISTRICT : HALIBURTON
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : MINK CR.TO PAUDASH LAKE
MINOR BASIN : ONTARIO
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 595

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	ND	ND	ND	0.50	0.87	0.96	0.45	0.31	0.37	0.76	0.50	0.75	0.61	
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BOD5														
INFLUENT (MG/L)	ND	ND	135.0	10.0	148.0	ND	14.0	133.0	17.0	106.0	96.0	66.0	80.6	
EFFLUENT (MG/L)	ND	ND	2.4	12.3	17.7	ND	2.8	5.7	6.8	4.8	4.6	1.5	6.5	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	6.15	15.39	ND	1.26	1.76	2.51	3.64	2.30	1.12	3.97	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	ND	ND	ND	53.0	84.0	ND	18.0	158.0	27.0	122.0	726.0	90.0	159.8	
EFFLUENT (MG/L)	ND	ND	42.0	17.0	26.0	ND	2.5	11.0	13.0	5.5	11.4	13.2	15.7	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	8.50	22.62	ND	1.12	3.41	4.81	4.18	5.70	9.90	9.58	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	ND	ND	2.4	1.6	0.9	ND	1.4	7.4	1.1	5.2	2.4	1.8	2.7	
EFFLUENT (MG/L)	ND	ND	0.7	1.9	0.8	ND	1.2	0.2	0.1	0.1	0.2	0.2	0.6	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	0.95	0.69	ND	0.54	0.06	0.03	0.07	0.10	0.15	0.37	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	NA	NA

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES

	START DATE	END DATE	ANTICIPATED COMPLIANCE
COLLECTION SYSTEM - COLLECTION SYSTEM UNDER REVIEW			1992
FACILITY EXPANSION/UPGRADING - ENGINEERING STUDY PHASE			1992

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : BOBCAYGEON
PLANT : BOBCAYGEON WPCP(SUMM.POP.SERVED(2480)
WORKS NUMBER : 110002498
TREATMENT : EXTENDED AERATION
: PHOSPHORUS REMOVAL CONTINUOUS
:
DESIGN CAPACITY : 3.05 (1000 M3)

REGION : CENTRAL
DISTRICT : VICTORIA
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : BOBCAYGEON RIVER
MINOR BASIN : ONTARIO
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 1,610

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.65	0.63	0.77	1.16	0.93	0.84	1.08	0.96	0.87	0.88	1.06	1.01	0.90	
BOD5														
INFLUENT (MG/L)	123.0	59.0	165.0	81.0	73.0	91.0	149.0	164.0	84.0	95.0	160.0	ND	113.1	
EFFLUENT (MG/L)	3.8	6.3	10.5	13.3	19.7	4.2	3.6	2.4	2.0	0.2	4.0	ND	6.4	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	2.47	3.96	8.08	15.42	18.32	3.52	3.88	2.30	1.74	0.17	4.24	ND	5.76	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	67.0	93.0	164.0	68.0	63.0	112.0	117.0	90.0	71.0	74.0	91.0	ND	91.8	
EFFLUENT (MG/L)	6.6	8.0	14.0	13.0	11.5	9.4	5.5	6.5	5.5	5.0	5.2	ND	8.2	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	4.29	5.04	10.78	15.08	10.69	7.89	5.94	6.24	4.78	4.40	5.51	ND	7.38	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.1	ND	4.9	3.0	3.3	3.2	5.5	5.2	4.5	4.1	4.3	ND	4.4	
EFFLUENT (MG/L)	0.2	0.2	0.5	0.3	0.4	0.2	0.2	0.1	0.1	0.2	0.2	0.3	0.2	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	0.13	0.12	0.38	0.34	0.37	0.16	0.21	0.09	0.08	0.17	0.21	0.30	0.18	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NO REMEDIAL MEASURES REPORTED

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : BRACEBRIDGE
PLANT : BRACEBRIDGE LAGOON
WORKS NUMBER : 120001979
TREATMENT : CONVENTIONAL LAGOON SEASONAL
: PHOSPHORUS REMOVAL - BATCH
:
DESIGN CAPACITY : 2.06 (1000 M3)

REGION : CENTRAL
DISTRICT : MUSKOKA, DIST. MUN.
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : MUSKOKA RIVER
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES
POPULATION SERVED :

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.18	0.14	0.17	0.17	0.19	0.25	ND	ND	ND	0.05	0.70	0.03	0.21	
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	13.18	60.93	40.80	38.30	
BOD5														
INFLUENT (MG/L)	210.0	144.0	104.0	109.0	129.0	135.0	ND	ND	ND	213.0	126.0	189.0	151.0	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.6	3.4	12.2	6.1	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.13	2.38	0.36	1.28	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	156.0	156.0	101.0	114.0	121.0	119.0	ND	ND	ND	172.0	93.0	115.0	127.4	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.9	4.9	12.9	8.2	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.34	3.43	0.38	1.72	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.9	6.7	5.4	4.4	4.9	5.9	ND	ND	ND	4.6	4.4	6.3	5.5	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.1	0.1	0.4	0.2	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND		0.07	0.01	0.04	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : BRACEBRIDGE
PLANT : BRACEBRIDGE WPCP
WORKS NUMBER : 110000054
TREATMENT : EXTENDED AERATION
: PHOSPHORUS REMOVAL-CONTINUOUS
: EFFLUENT POLISHING
DESIGN CAPACITY : 3.19 (1000 M3)

REGION : CENTRAL
DISTRICT : MUSKOKA, DIST. MUN.
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : MUSKOKA RIVER
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 6,408

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.77	1.74	1.60	2.03	2.13	2.29	1.78	1.84	1.75	1.76	2.07	1.81	1.88	
BOD5														
INFLUENT (MG/L)	210.0	144.0	104.0	109.0	129.0	135.0	168.0	188.0	272.0	213.0	126.0	189.0	165.6	
EFFLUENT (MG/L)	4.2	2.7	1.5	0.5	1.2	3.0	5.3	1.1	0.9	1.2	0.5	4.0	2.2	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	7.43	4.69	2.40	1.01	2.55	6.87	9.43	2.02	1.57	2.11	1.03	7.24	4.14	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	156.0	156.0	101.0	114.0	121.0	119.0	158.0	154.0	273.0	172.0	93.0	115.0	144.3	
EFFLUENT (MG/L)	6.4	19.0	13.3	6.0	5.0	3.7	5.8	2.5	5.3	1.0	0.9	3.7	6.1	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	11.32	33.06	21.28	12.18	10.65	8.47	10.32	4.60	9.27	1.76	1.86	6.69	11.47	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.9	6.7	5.4	4.4	4.9	5.9	6.5	6.9	14.9	4.6	4.4	6.3	6.5	
EFFLUENT (MG/L)	0.3	0.5	0.2	0.2	0.2	0.3	0.5	0.4	0.3	0.1	0.1	0.2	0.3	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	0.53	0.87	0.32	0.40	0.42	0.68	0.89	0.73	0.52	0.17	0.20	0.36	0.56	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES	START DATE	END DATE	ANTICIPATED COMPLIANCE
INFLUENT SEWAGE - ENFORCING SEWER USE BYLAW			1989/03

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : BRADFORD
PLANT : BRADFORD WPCP
WORKS NUMBER : 110000944
TREATMENT : EXTENDED AERATION
: PHOSPHORUS REMOVAL-CONTINUOUS
: EFFLUENT POLISHING
DESIGN CAPACITY : 6.81 (1000 M3)

REGION : CENTRAL
DISTRICT : SIMCOE
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : SCHOMBERG RIVER
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 12,000

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	4.10	3.94	4.12	4.23	4.26	4.63	4.04	4.27	4.31	4.66	5.11	4.44	4.34	
BOD5														
INFLUENT (MG/L)	194.5	202.0	237.0	166.0	147.0	149.5	169.0	169.0	176.5	210.0	191.5	245.0	188.1	
EFFLUENT (MG/L)	5.4	4.5	5.5	4.0	3.1	1.9	2.4	1.7	1.4	1.6	3.6	7.8	3.6	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	22.14	17.73	22.66	16.92	13.20	8.79	9.69	7.25	6.03	7.45	18.39	34.63	15.62	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	262.5	303.0	502.5	152.0	178.0	153.5	216.0	348.4	358.3	523.4	574.9	418.9	332.6	
EFFLUENT (MG/L)	2.9	4.3	5.0	4.0	2.8	1.6	2.8	3.3	3.3	2.4	2.2	2.1	3.1	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	11.89	16.94	20.60	16.92	11.92	7.40	11.31	14.09	14.22	11.18	11.24	9.32	13.45	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.8	7.4	7.8	5.3	7.0	6.5	7.8	6.5	7.3	7.6	5.7	7.3	6.9	
EFFLUENT (MG/L)	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.2	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	0.82	0.78	0.82	0.84	0.42	0.46	0.80	0.85	0.86	0.93	1.02	0.44	0.87	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : BRIGHTON
PLANT : BRIGHTON LAGOON
WORKS NUMBER : 110000953
TREATMENT : AERATED CELL PLUS LAGOON
: CONTINUOUS DISCHARGE
: PHOSPHORUS REMOVAL CONTINUOUS
DESIGN CAPACITY : 3.86 (1000 M3)

REGION : CENTRAL
DISTRICT : NORTHUMBERLAND
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : LONTI.PRESQUILE BAY
MINOR BASIN : ONTARIO
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 3,750

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	2.99	2.47	3.10	3.49	3.80	3.46	1.78	1.85	2.57	3.45	3.98	ND	2.99	
LAGOON DISCHARGE	92.84	69.24	96.27	100.16	117.72	103.99	55.30	57.50	78.85	106.86	19.49	ND	81.65	
BOD5														
INFLUENT (MG/L)	72.0	52.0	81.0	72.0	27.0	53.0	29.0	83.0	77.0	64.0	79.0	77.0	63.8	
EFFLUENT (MG/L)	11.0	20.8	21.9	23.0	8.0	22.6	0.5	3.7	1.6	2.5	5.6	4.9	10.5	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	32.89	51.37	67.89	80.27	30.40	78.19	0.89	6.84	4.11	8.62	22.28	ND	31.40	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	66.0	60.0	62.0	50.0	38.0	74.0	47.0	86.0	68.0	74.0	72.0	76.0	64.4	
EFFLUENT (MG/L)	12.0	29.0	31.0	31.5	6.0	7.5	6.5	3.0	4.0	1.6	2.2	2.0	11.4	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	35.88	71.63	96.10	109.93	22.80	25.95	11.57	5.55	10.28	5.52	8.75	ND	34.09	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	4.1	2.8	5.0	2.9	1.8	3.6	2.7	4.7	4.6	1.4	4.0	4.2	3.5	
EFFLUENT (MG/L)	0.7	0.9	1.3*	1.0	0.7	0.4	0.5	0.1	0.3	0.5	0.3	0.2	0.6	1
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	2.09	2.22	4.03	3.49	2.66	1.38	0.89	0.18	0.77	1.72	1.19	ND	1.79	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	1.0 MG/L	NO

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (E.G. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : BROCK
PLANT : BEAVERTON RIVER 1 LAGOON (SUNDERLAND)
WORKS NUMBER : 120003496
TREATMENT : CONVENTIONAL LAGOON CONTINUOUS
: EXFILTRATION LAGOON
:
DESIGN CAPACITY : 0.75 (1000 M3)

REGION : CENTRAL
DISTRICT : DURHAM, REG. MUN.
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : NO DISC.TO SURFACE WATER
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 875

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.28	0.28	0.27	0.30	0.34	0.31	0.26	0.24	0.27	0.25	0.28	0.27	0.28	
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BOD5														
INFLUENT (MG/L)	ND	680.0	210.0	320.0	377.0	175.0	9.0	310.0	230.0	828.0	258.0	423.0	347.3	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
SUSPENDED SOLIDS														
INFLUENT (MG/L)	352.0	356.0	200.0	188.0	328.0	424.0	7.0	156.0	342.0	273.0	238.0	482.0	278.8	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	41.0	88.0	8.5	10.5	ND	ND	ND	ND	26.4	18.5	3.9	19.1	27.0	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	NA	NO DIRECT DISCHARGE
SS	NA	NO DIRECT DISCHARGE
TP	NA	NO DIRECT DISCHARGE

NOTE:
BOD - HAS NO CRITERIA
SS - HAS NO CRITERIA
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : BROCK
PLANT : BEAVERTON RIVER 2 LAGOON (CANNINGTON)
WORKS NUMBER : 110001248
TREATMENT : CONVENTIONAL LAGOON SEASONAL
: PHOSPHORUS REMOVAL - BATCH
:
DESIGN CAPACITY : 0.92 (1000 M3)

REGION : CENTRAL
DISTRICT : DURHAM, REG. MUN.
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : BEAVERTON RIVER
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 1,835

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.67	0.67	0.75	0.98	1.11	0.81	0.61	0.53	0.54	0.59	0.81	0.63	0.73	
LAGOON DISCHARGE	ND	ND	ND	ND	172.75	ND	ND	ND	ND	41.82	67.28	ND	93.95	
BOD5														
INFLUENT (MG/L)	27.0	98.0	190.0	146.0	66.0	119.0	172.0	290.0	112.0	81.0	159.0	167.0	135.6	
EFFLUENT (MG/L)	ND	ND	ND	ND	5.6	ND	ND	ND	ND	11.9	9.9	ND	9.1	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	6.21	ND	ND	ND	ND	7.02	8.01	ND	6.64	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	217.0	442.0	206.0	254.0	162.0	168.0	200.0	262.0	212.0	234.0	152.0	295.0	233.7	
EFFLUENT (MG/L)	ND	ND	ND	ND	4.8	ND	ND	ND	ND	6.5	4.4	ND	5.2	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	5.32	ND	ND	ND	ND	3.83	3.56	ND	3.80	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	11.5	13.0	10.1	4.6	ND	ND	ND	9.6	7.2	4.9	3.8	6.5	7.9	
EFFLUENT (MG/L)	ND	ND	ND	ND	0.1	ND	ND	ND	ND	0.2	0.2	ND	0.2	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	ND	0.11	ND	ND	ND	ND	0.11	0.16	ND	0.15	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NO REMEDIAL MEASURES REPORTED

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : BROCK
PLANT : LAKE SIMCOE LAGOON (BEAVERTON)
WORKS NUMBER : 110000908
TREATMENT : CONVENTIONAL LAGOON SEASONAL
: PHOSPHORUS REMOVAL - BATCH
:
DESIGN CAPACITY : 1.73 (1000 M3)

REGION : CENTRAL
DISTRICT : DURHAM, REG. MUN.
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : LAKE SIMCOE
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 2,570

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.54	1.35	1.99	2.45	2.69	2.59	1.60	1.58	1.50	1.61	2.41	1.66	1.91	
LAGOON DISCHARGE	ND	ND	ND	118.20	236.39	ND	ND	ND	ND	154.56	77.28	ND	146.61	
BOD5														
INFLUENT (MG/L)	237.0	123.0	387.0	103.0	111.0	156.0	176.0	344.0	169.0	520.0	89.0	158.0	214.4	
EFFLUENT (MG/L)	ND	ND	ND	8.5	3.6	ND	ND	ND	ND	8.8	13.5	ND	8.6	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	20.82	9.68	ND	ND	ND	ND	14.16	32.53	ND	16.43	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	216.0	180.0	80.0	108.0	184.0	196.0	373.0	545.0	842.0	678.0	80.0	136.0	301.5	
EFFLUENT (MG/L)	ND	ND	ND	8.8	3.5	ND	ND	ND	ND	4.5	5.2	ND	5.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	21.56	9.41	ND	ND	ND	ND	7.24	12.53	ND	10.51	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	11.2	9.7	9.5	4.8	ND	ND	ND	10.3	12.1	12.1	3.9	4.2	8.6	
EFFLUENT (MG/L)	ND	ND	ND	0.1	0.1	ND	ND	ND	ND	0.1	0.1	ND	0.1	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	0.24	0.26	ND	ND	ND	ND	0.16	0.24	ND	0.19	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : BURLINGTON
PLANT : SKYWAY WWTP
WORKS NUMBER : 1120000020
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL CONTINUOUS
:
DESIGN CAPACITY : 93.19 (1000 M3)

REGION : CENTRAL
DISTRICT : HALTON, REG. MUN.
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : HAMILTON HARBOUR
MINOR BASIN : ONTARIO
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 120,100

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	63.03	60.40	65.90	76.26	71.54	66.54	66.65	67.42	66.89	64.59	72.69	62.14	67.00	
BOD5														
INFLUENT (MG/L)	223.0	255.0	215.0	173.0	203.0	203.0	170.0	250.0	287.0	217.0	147.0	295.0	212.3	
EFFLUENT (MG/L)	9.6	10.0	16.0	16.0	13.0	15.0	9.9	7.0	8.7	11.1	7.7	5.4	10.8	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	605.08	604.00	1054.40	1220.16	930.02	998.10	659.83	471.94	581.94	716.94	559.71	335.55	723.60	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	249.0	271.0	171.0	272.0	234.0	190.0	235.0	460.0	347.0	231.0	127.0	272.0	254.8	
EFFLUENT (MG/L)	5.7	8.3	22.6	9.0	12.0	14.7	11.0	6.5	6.5	6.8	8.2	5.4	9.7	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	359.27	501.32	1489.34	686.34	858.48	978.13	733.15	438.23	421.40	439.21	596.05	335.55	649.90	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.4	8.0	7.3	7.2	7.8	6.1	6.7	9.0	10.2	7.1	6.3	7.1	7.4	
EFFLUENT (MG/L)	0.7	0.8	1.0	0.5	0.7	0.7	0.8	0.8	0.7	0.7	1.0	0.6	0.8	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	44.12	48.32	65.90	38.13	50.07	46.57	53.32	53.93	46.82	45.21	72.69	37.28	53.60	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : CAMPBELLFORD
PLANT : CAMPBELLFORD WPCP
WORKS NUMBER : 110000962
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL-CONTINUOUS
:
DESIGN CAPACITY : 5.91 (1000 M3)

REGION : CENTRAL
DISTRICT : NORTHUMBERLAND
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : TRENT RIVER
MINOR BASIN : ONTARIO
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 3,255

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	5.29	4.78	5.68	7.35	7.13	7.24	6.16	5.78	5.77	4.90	6.11	5.74	5.99	
BOD5														
INFLUENT (MG/L)	30.0	75.0	122.5	55.5	27.0	21.0	17.0	32.0	33.5	100.5	30.5	59.0	50.3	
EFFLUENT (MG/L)	5.4	3.0	3.5	1.6	3.2	2.0	4.0	2.1	1.4	5.5	4.6	15.1	4.3	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	28.56	14.34	19.88	11.76	22.81	14.48	24.64	12.13	8.07	26.95	28.10	86.67	25.76	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	48.0	102.0	217.0	75.0	88.0	26.5	30.0	51.0	35.5	120.5	35.5	54.0	73.6	
EFFLUENT (MG/L)	9.7	8.8	9.5	4.8	6.0	9.0	6.3	5.8	7.8	7.9	8.4	7.8	7.7	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	51.31	42.06	53.96	35.28	42.78	65.16	38.80	33.52	45.00	38.71	51.32	44.77	46.12	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	5.4	3.4	5.1	2.0	1.8	1.6	1.2	2.0	2.1	3.2	1.5	2.6	2.7	
EFFLUENT (MG/L)	0.6	0.6	0.5	0.8	0.4	0.4	0.6	0.5	0.5	0.6	0.5	0.6	0.6	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	3.17	2.86	2.84	5.88	2.85	2.89	3.69	2.89	2.88	2.94	3.05	3.44	3.59	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NO REMEDIAL MEASURES REPORTED

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : COBOURG
PLANT : COBOURG WPCP NO 1
WORKS NUMBER : 120000097
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL-CONTINUOUS
:
DESIGN CAPACITY : 16.04 (1000 M3)

REGION : CENTRAL
DISTRICT : NORTHUMBERLAND
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : COBOURG BROOK
MINOR BASIN : ONTARIO
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 5,500

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	7.00	6.77	6.91	7.91	7.86	8.14	6.09	5.46	6.27	6.59	9.46	5.77	7.02	
BOD5														
INFLUENT (MG/L)	547.0	591.0	547.0	558.0	493.0	473.0	447.0	548.0	604.0	510.0	485.0	534.0	528.1	
EFFLUENT (MG/L)	11.3	33.3	41.7	29.1	12.8	10.5	8.4	8.7	13.1	4.4	13.6	45.4	19.4	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	79.10	225.44	288.14	230.18	100.60	85.47	51.15	47.50	82.13	28.99	128.65	261.95	136.19	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	256.0	354.0	241.0	230.0	229.0	209.0	245.0	244.0	337.0	322.0	249.0	239.0	262.9	
EFFLUENT (MG/L)	13.1	26.1	38.0	20.5	12.6	11.7	10.3	9.3	11.8	6.6	13.0	13.9	15.6	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	91.70	176.69	262.58	162.15	99.03	95.23	62.72	50.77	73.98	43.49	122.98	80.20	109.51	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	4.2	2.9	4.5	3.3	3.0	3.1	4.4	4.4	6.5	3.4	4.8	5.3	4.2	
EFFLUENT (MG/L)	0.6	1.1*	1.7*	0.5	0.9	1.1*	1.4*	1.1*	1.4*	0.6	0.7	1.6*	1.1	7
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	4.20	7.44	11.74	3.95	7.07	8.95	8.52	6.00	8.77	3.95	6.62	9.23	7.72	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	NO

NOTE:
BOD ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA NOT APPLICABLE

REMEDIAL MEASURES

	START DATE	END DATE	ANTICIPATED COMPLIANCE
OPERATIONAL/PROCESS - PHOSPHORUS REMOVAL BEING UPGRADED			1989/12
EQUIPMENT/MAINTENANCE - NEW EQUIPMENT BEING INSTALLED			1989/12

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : COBOURG
PLANT : COBOURG WPCP NO 2
WORKS NUMBER : 120003192
TREATMENT : EXTENDED AERATION
: PHOSPHORUS REMOVAL-CONTINUOUS
:
DESIGN CAPACITY : 11.70 (1000 M3)

REGION : CENTRAL
DISTRICT : NORTHUMBERLAND
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : LAKE ONTARIO
MINOR BASIN : ONTARIO
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 5,500

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	2.89	2.86	2.91	3.70	3.91	4.55	3.46	3.17	3.46	4.30	6.49	5.03	3.89	
BOD5														
INFLUENT (MG/L)	157.0	184.0	173.0	124.0	156.0	176.0	135.0	149.0	131.0	121.0	107.0	100.0	142.8	
EFFLUENT (MG/L)	19.0	24.4	13.0	9.0	7.8	8.4	6.1	6.1	6.0	8.7	18.2	13.3	11.7	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	54.91	69.78	37.83	33.30	30.49	38.22	21.10	19.33	20.76	37.41	118.11	66.89	45.51	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	195.0	260.0	242.0	212.0	254.0	433.0	232.0	259.0	221.0	214.0	290.0	225.0	253.1	
EFFLUENT (MG/L)	16.5	11.1	9.4	9.1	9.2	10.2	10.2	11.1	6.9	13.5	13.1	7.0	10.6	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	47.68	31.74	27.35	33.67	35.97	46.41	35.29	35.18	23.87	58.05	85.01	35.21	41.23	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	3.7	3.0	4.3	3.8	3.1	5.9	4.9	3.3	5.6	3.5	3.3	3.2	4.0	
EFFLUENT (MG/L)	0.6	0.7	0.4	0.7	0.5	0.7	0.6	0.9	0.7	0.6	0.5	0.5	0.6	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	1.73	2.00	1.16	2.59	1.95	3.18	2.07	2.85	2.42	2.58	3.24	2.51	2.33	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : COLBORNE
PLANT : COLBORNE WPCP
WORKS NUMBER : 1200000088
TREATMENT : SUTTON PROCESS
: PHOSPHORUS REMOVAL CONTINUOUS
:
DESIGN CAPACITY : 1.37 (1000 M3)

REGION : CENTRAL
DISTRICT : NORTHUMBERLAND
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : COLBORNE CREEK
MINOR BASIN : ONTARIO
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 1,800

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.94	1.63	1.38	0.67	1.27	1.30	1.54	1.21	ND	1.11	1.61	0.34	1.18	
BOD5														
INFLUENT (MG/L)	75.0	138.0	116.0	43.0	46.0	54.0	78.0	122.0	106.0	144.0	39.0	ND	87.4	
EFFLUENT (MG/L)	4.3	4.0	8.8	3.4	0.8	3.6	ND	0.7	0.8	2.3	ND	ND	3.2	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	4.04	6.52	12.14	2.27	1.01	4.68	ND	0.84	ND	2.55	ND	ND	3.78	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	111.0	168.0	178.0	45.0	56.0	77.0	120.0	165.0	174.0	532.0	78.0	ND	154.9	
EFFLUENT (MG/L)	5.4	5.6	6.5	6.5	0.5	6.0	ND	2.5	4.5	0.8	ND	ND	4.3	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	5.07	9.12	8.97	4.35	0.63	7.80	ND	3.02	ND	0.88	ND	ND	5.07	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	5.9	ND	4.7	3.3	2.3	2.9	5.4	5.8	5.8	6.4	2.5	ND	4.5	
EFFLUENT (MG/L)	0.3	ND	0.2	0.3	0.2	0.6	ND	1.1	0.6	0.5	ND	ND	0.5	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	0.28	ND	0.27	0.20	0.25	0.78	ND	1.33	ND	0.55	ND	ND	0.59	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	INSUFFICIENT DATA

NOTE:
BOD - HAS NO CRITERIA
SS - HAS NO CRITERIA
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : COLDWATER
PLANT : COLDWATER WPCP
WORKS NUMBER : 110001596
TREATMENT : EXTENDED AERATION
:
:
DESIGN CAPACITY : 0.54 (1000 M3)

REGION : CENTRAL
DISTRICT : SIMCOE
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : COLDWATER RIVER
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 1,015

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.44	0.35	0.57	0.62	0.64	0.56	0.39	0.36	0.32	0.33	0.43	0.50	0.46	
BOD5														
INFLUENT (MG/L)	101.0	70.5	68.0	85.0	73.1	84.6	54.1	122.0	107.0	89.9	51.4	207.0	92.8	
EFFLUENT (MG/L)	3.5	4.5	7.0	5.9	4.0	5.4	7.5	3.9	4.8	2.9	5.9	1.3	4.7	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	1.54	1.57	3.99	3.65	2.56	3.02	2.92	1.40	1.53	0.95	2.53	0.65	2.16	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	69.0	78.0	78.0	79.0	117.5	85.9	70.5	104.0	131.0	90.5	52.5	249.5	100.5	
EFFLUENT (MG/L)	3.5	5.3	6.0	5.6	5.8	7.5	8.5	4.3	6.3	2.4	8.3	7.9	6.0	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	1.54	1.85	3.42	3.47	3.71	4.20	3.31	1.54	2.01	0.79	3.56	3.95	2.76	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	5.5	3.3	5.1	3.8	4.8	5.4	5.4	5.6	5.3	3.6	2.8	8.7	4.9	
EFFLUENT (MG/L)	2.6	2.6	3.0	2.6	3.5	4.0	5.2	4.6	4.5	4.3	2.3	3.1	3.5	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	1.14	0.91	1.71	1.61	2.24	2.24	2.02	1.65	1.44	1.41	0.98	1.55	1.61	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	NA	NA

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : COLLINGWOOD
PLANT : COLLINGWOOD WPCP
WORKS NUMBER : 120000550
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL CONTINUOUS
:
DESIGN CAPACITY : 24.54 (1000 M3)

REGION : CENTRAL
DISTRICT : SIMCOE
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : GEORGIAN BAY
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 12,135

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	19.11	17.45	20.15	21.56	20.81	14.34	10.58	11.53	11.71	12.51	13.95	12.91	15.55	
BOD5														
INFLUENT (MG/L)	181.0	200.0	175.0	205.0	197.0	187.0	278.0	344.0	271.0	182.0	208.0	209.0	219.8	
EFFLUENT (MG/L)	6.2	8.8	6.3	6.4	6.6	7.9	9.0	10.9	9.1	9.3	8.1	11.0	8.3	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	118.48	153.56	126.94	137.98	137.34	113.28	95.22	125.67	106.56	116.34	112.99	142.01	129.07	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	130.0	162.0	216.0	145.0	176.0	195.0	266.0	179.0	161.0	145.0	163.0	147.0	173.8	
EFFLUENT (MG/L)	9.2	10.1	10.6	9.6	10.9	13.4	14.2	13.2	9.4	9.6	12.3	15.0	11.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	175.81	176.24	213.59	206.97	226.82	192.15	150.23	152.19	110.07	120.09	171.58	193.65	178.83	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	5.3	7.1	7.6	7.0	6.0	8.0	6.8	7.3	4.7	5.7	4.8	4.4	6.2	
EFFLUENT (MG/L)	0.5	0.8	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.5	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	9.55	13.96	12.09	10.78	10.40	7.17	5.29	5.76	5.85	6.25	6.97	5.16	7.78	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : COOKSTOWN
PLANT : COOKSTOWN WPCP
WORKS NUMBER : 110002265
TREATMENT : SUTTON PROCESS
: PHOSPHORUS REMOVAL-CONTINUOUS
: SEASONAL DISCHARGE
DESIGN CAPACITY : 0.82 (1000 M3)

REGION : CENTRAL
DISTRICT : SIMCOE
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : INNISFIL CREEK
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 1,027

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.20	0.18	0.23	0.22	0.21	0.22	0.20	0.22	0.27	0.30	0.36	0.37	0.25	
BOD5														
INFLUENT (MG/L)	121.5	137.0	114.5	196.0	83.5	182.5	106.0	114.5	182.0	223.0	155.5	163.0	148.3	
EFFLUENT (MG/L)	ND	ND	ND	ND	4.1	ND	ND	ND	ND	ND	0.4	ND	2.3	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	0.86	ND	ND	ND	ND	ND	0.14	ND	0.58	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	155.5	168.0	199.0	580.0	158.5	352.0	170.0	131.0	201.5	191.0	178.5	240.0	227.1	
EFFLUENT (MG/L)	ND	ND	ND	ND	9.0	ND	ND	ND	ND	ND	1.1	ND	5.1	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	1.89	ND	ND	ND	ND	ND	0.39	ND	1.28	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	8.4	9.1	5.9	8.6	5.4	8.4	6.5	6.0	10.2	8.5	8.3	8.0	7.8	
EFFLUENT (MG/L)	ND	ND	ND	ND	0.1	ND	ND	ND	ND	ND	0.4	ND	0.3	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	0.02	ND	ND	ND	ND	ND	0.14	ND	0.08	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	NA	NA

NO REMEDIAL MEASURES REPORTED

NOTE:
BOD - HAS NO CRITERIA
SS - HAS NO CRITERIA
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : DYSART ET AL
PLANT : HALIBURTON WPCP
WORKS NUMBER : 110001603
TREATMENT : EXTENDED AERATION
: PHOSPHORUS REMOVAL CONTINUOUS
: EFFLUENT POLISHING
DESIGN CAPACITY : 0.45 (1000 M3)

REGION : CENTRAL
DISTRICT : HALIBURTON
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : DRAG R. TO GRASS LAKE
MINOR BASIN : ONTARIO
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 920

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.28	0.26	0.33	0.37	0.37	0.32	0.27	0.21	0.23	0.24	0.34	0.29	0.29	
BOD5														
INFLUENT (MG/L)	147.0	190.0	42.0	135.0	29.0	132.0	163.0	134.0	50.0	50.0	70.0	26.0	97.3	
EFFLUENT (MG/L)	3.9	0.5	0.5	0.5	14.8	10.0	3.4	3.8	0.5	1.8	5.0	0.6	3.8	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	1.09	0.13	0.16	0.18	5.47	3.20	0.91	0.79	0.11	0.43	1.70	0.17	1.10	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	230.0	250.0	51.0	124.0	40.0	49.0	195.0	143.0	64.0	39.0	83.0	28.0	108.0	
EFFLUENT (MG/L)	4.0	8.0	5.0	10.5	13.0	8.8	6.5	2.5	5.0	4.9	5.1	6.6	6.7	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	1.12	2.08	1.65	3.88	4.81	2.81	1.75	0.52	1.15	1.17	1.73	1.91	1.94	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	14.6	7.8	1.2	4.8	ND	4.8	8.3	6.3	3.0	3.9	2.6	1.4	5.3	
EFFLUENT (MG/L)	0.5	0.6	0.3	0.5	ND	0.5	0.6	0.7	0.4	0.5	0.6	0.5	0.5	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	0.14	0.15	0.09	0.18	ND	0.16	0.16	0.14	0.09	0.12	0.20	0.14	0.15	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (E.G. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES

	START DATE	END DATE	ANTICIPATED COMPLIANCE
FACILITY EXPANSION/UPGRADING - ENVIRONMENTAL ASSESSMENT BEING CONDUCTED			

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : EAST GWILLIMBURY
PLANT : HOLLAND LANDING LAGOON
WORKS NUMBER : 120001620
TREATMENT : CONVENTIONAL LAGOON SEASONAL
: PHOSPHORUS REMOVAL-CONTINUOUS
:
DESIGN CAPACITY : 1.36 (1000 M3)

REGION : CENTRAL
DISTRICT : YORK, REG. MUN.
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : HOLLAND RIVER
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 2,200

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.27	1.06	1.03	1.21	1.26	0.89	0.89	0.89	1.04	1.30	1.42	1.14	1.12	
LAGOON DISCHARGE	ND	ND	ND	ND	191.00	ND	ND	ND	ND	ND	91.68	ND	141.34	
BOD5														
INFLUENT (MG/L)	139.0	ND	202.0	132.0	104.0	84.0	ND	144.0	76.0	182.0	115.0	102.0	128.0	
EFFLUENT (MG/L)	ND	ND	ND	ND	12.9	ND	ND	ND	ND	ND	12.8	ND	12.9	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	ND	16.25	ND	ND	ND	ND	ND	18.17	ND	14.45	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	252.0	ND	276.0	91.0	117.0	83.0	ND	120.0	83.0	188.0	124.0	116.0	145.0	
EFFLUENT (MG/L)	ND	ND	ND	ND	19.1	ND	ND	ND	ND	ND	26.8	ND	23.0	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	ND	24.06	ND	ND	ND	ND	ND	38.05	ND	25.76	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	9.0	ND	5.2	ND	7.0	5.3	ND	7.1	7.9	11.1	7.9	5.8	7.4	
EFFLUENT (MG/L)	ND	ND	ND	ND	0.7	ND	ND	ND	ND	ND	0.4	ND	0.6	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	ND	0.88	ND	ND	ND	ND	ND	0.56	ND	0.67	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : EAST GWILLIMBURY
PLANT : MOUNT ALBERT WPCP
WORKS NUMBER : 1200018063
TREATMENT : EXTENDED AERATION
: PHOSPHORUS REMOVAL CONTINUOUS
: SEASONAL DISCHARGE
DESIGN CAPACITY : 0.68 (1000 M3)

REGION : CENTRAL
DISTRICT : YORK, REG. MUN.
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : MOUNT ALBERT CREEK
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 1,100

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.31	0.31	0.30	0.35	0.37	0.39	0.34	0.34	0.36	0.34	0.39	0.36	0.35	
BOD5														
INFLUENT (MG/L)	125.0	15.0	120.0	135.0	160.0	118.0	ND	98.0	19.0	164.0	78.0	61.0	99.4	
EFFLUENT (MG/L)	33.0	ND	ND	ND	ND	ND	ND	ND	ND	10.6	15.1	ND	19.6	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	10.23	ND	ND	ND	ND	ND	ND	ND	ND	3.60	5.88	ND	6.86	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	93.0	73.0	173.0	166.0	105.0	75.0	ND	150.0	46.0	71.0	153.0	94.0	109.0	
EFFLUENT (MG/L)	19.8	ND	ND	ND	ND	ND	ND	ND	ND	28.8	29.3	ND	26.0*	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	6.13	ND	ND	ND	ND	ND	ND	ND	ND	9.79	11.42	ND	9.10	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	7.5	15.0	9.3	ND	6.6	6.6	ND	5.9	3.3	8.7	5.0	4.1	7.2	
EFFLUENT (MG/L)	0.4	ND	ND	ND	ND	ND	ND	ND	ND	0.3	0.3	ND	0.3	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	0.12	ND	ND	ND	ND	ND	ND	ND	ND	0.10	0.11	ND	0.11	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	NO
TP	1.0 MG/L	YES

NO REMEDIAL MEASURES REPORTED

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : ELMVALE
PLANT : ELMVALE LAGOON
WORKS NUMBER : 110000169
TREATMENT : CONVENTIONAL LAGOON CONTINUOUS
:
:
DESIGN CAPACITY : 0.75 (1000 M3)

REGION : CENTRAL
DISTRICT : SIMCOE
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : WYE RIVER
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 1,565

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	ND	1.21	1.42	1.63	1.59	1.25	0.95	0.98	1.11	1.39	1.59	1.26	1.31	
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BOD5														
INFLUENT (MG/L)	ND	126.0	152.0	86.0	154.0	142.0	208.0	212.0	258.0	183.0	149.0	364.0	184.9	
EFFLUENT (MG/L)	ND	13.6	35.6	24.4	11.7	16.0	17.1	21.2	16.0	20.5	21.1	ND	19.7	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	16.45	50.55	39.77	18.60	20.00	16.24	20.77	17.76	28.49	33.54	ND	25.81	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	ND	184.0	262.0	109.0	464.0	111.0	318.0	140.0	291.0	288.0	191.0	1,120.0	316.2	
EFFLUENT (MG/L)	ND	25.0	21.5	24.0	73.0	12.0	9.0	28.0	30.5	35.0	3.3	ND	26.1	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	30.25	30.53	39.12	116.07	15.00	8.55	27.44	33.85	48.65	5.24	ND	34.19	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	ND	ND	7.4	5.9	10.4	8.9	6.6	8.9	8.7	8.2	7.6	7.5	8.0	
EFFLUENT (MG/L)	ND	ND	4.5	3.0	2.8	3.5	3.8	3.9	4.0	2.6	3.4	ND	3.5	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	6.39	4.89	4.45	4.37	3.61	3.82	4.44	3.61	5.40	ND	4.59	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	NA	NA

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : ESSA
PLANT : ANGUS WPCP
WORKS NUMBER : 1100003282
TREATMENT : EXTENDED AERATION
: PHOSPHORUS REMOVAL CONTINUOUS
:
DESIGN CAPACITY : 3.39 (1000 M3)

REGION : CENTRAL
DISTRICT : SIMCOE
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : NOTTAWASAGA RIVER
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 2,560

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.13	0.94	1.02	1.14	1.16	1.18	0.90	0.83	0.87	0.92	1.12	1.09	1.03	
BOD5														
INFLUENT (MG/L)	130.5	179.0	170.5	51.0	157.5	123.0	151.5	148.0	129.5	223.5	199.0	196.0	154.9	
EFFLUENT (MG/L)	4.1	3.1	6.5	1.6	2.6	2.5	3.0	3.2	3.6	6.3	3.0	1.8	3.4	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	4.63	2.91	6.63	1.82	3.01	2.95	2.70	2.65	3.13	5.79	3.36	1.96	3.50	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	127.0	192.0	222.0	102.5	245.0	124.5	149.0	145.5	289.5	256.0	168.0	261.0	190.2	
EFFLUENT (MG/L)	5.4	6.5	9.5	8.0	13.3	10.3	6.6	5.8	8.8	6.7	3.9	4.6	7.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	6.10	6.11	9.69	9.12	15.42	12.15	5.94	4.81	7.65	6.16	4.36	5.01	7.73	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	7.1	7.8	7.5	3.7	6.7	4.3	6.7	7.7	8.3	8.5	7.3	8.2	7.0	
EFFLUENT (MG/L)	0.1	0.2	0.2	0.2	0.3	0.2	0.3	0.3	0.4	0.2	0.3	0.2	0.2	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	0.11	0.18	0.20	0.22	0.34	0.23	0.27	0.24	0.34	0.18	0.33	0.21	0.21	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : FENELON FALLS
PLANT : FENELON FALLS WPCP(SUMMER POPSERVE 3136)
WORKS NUMBER : 110001612
TREATMENT : OXIDATION DITCH
: PHOSPHORUS REMOVAL-CONTINUOUS
:
DESIGN CAPACITY : 1.00 (1000 M3)

REGION : CENTRAL
DISTRICT : VICTORIA
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : FENELON RIVER
MINOR BASIN : ONTARIO
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 1,817

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.88	0.83	1.06	1.27	1.23	0.96	0.91	0.89	0.88	1.19	1.36	1.05	1.04	
BOD5														
INFLUENT (MG/L)	114.0	106.0	126.0	65.5	82.0	127.0	170.0	174.0	124.0	105.0	68.0	92.0	112.8	
EFFLUENT (MG/L)	3.8	17.5	6.0	9.6	37.3	6.0	5.1	0.9	3.2	0.7	11.8	16.4	9.9	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	3.34	14.52	6.36	12.19	45.87	5.76	4.64	0.80	2.81	0.83	16.04	17.22	10.30	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	100.0	150.0	132.0	83.5	78.0	121.0	172.0	162.0	129.0	83.0	72.0	88.0	114.2	
EFFLUENT (MG/L)	9.4	23.5	15.0	19.3	32.0	13.6	12.0	5.0	8.0	5.0	9.0	10.4	13.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	8.27	19.50	15.90	24.51	39.36	13.05	10.92	4.45	7.04	5.95	12.24	10.92	14.04	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	4.9	5.6	6.3	4.5	6.0	3.8	7.7	8.1	6.3	5.4	4.2	4.9	5.6	
EFFLUENT (MG/L)	0.2	0.7	0.4	1.0	0.8	0.3	0.3	0.3	0.5	0.3	0.4	0.3	0.5	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	0.17	0.58	0.42	1.27	0.98	0.28	0.27	0.26	0.44	0.35	0.54	0.31	0.52	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES

START DATE	END DATE	ANTICIPATED COMPLIANCE

NO ACTION - MARGINAL FAILURE-MONITORING LEVEL OF FAILED PARAMETER CLOSELY
NO REMEDIAL MEASURES DESCRIPTION

1989 CERTIFICATE OF APPROVAL ASSESSMENT

MUNICIPALITY	: GEORGINA	REGION	: CENTRAL
PLANT	: KESWICK WPCP	DISTRICT	: YORK, REG. MUN.
WORKS NUMBER	: 120001755	OPERATING AUTHORITY	: MUNICIPAL
TREATMENT	: EXTENDED AERATION	WATERCOURSE	: COOK BAY(LAKESIMCOE)
	: PHOSPHORUS REMOVAL-CONTINUOUS	MINOR BASIN	: HURON
	:	MAJOR BASIN	: GREAT LAKES
DESIGN CAPACITY	: 17.07 (1000 M3)	POPULATION SERVED	: 8,000

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	3.37	3.58	3.65	4.44	4.85	4.56	3.78	3.96	3.83	4.20	4.92	4.41	4.13	
BOD5														
INFLUENT (MG/L)	104.0	116.0	99.0	89.0	92.0	72.0	105.0	114.0	132.0	174.0	113.0	109.0	109.9	
EFFLUENT (MG/L)	2.3	0.5	0.9	0.7	0.5	0.5	0.4	0.3	0.6	0.3	0.3	0.3	0.6	
CONCENTRATION LIMIT (MG/L)													10.0	
LOADING (KG/D)	7.75	1.79	3.28	3.10	2.42	2.28	1.51	1.18	2.29	1.26	1.47	1.32	2.48	
LOADING LIMIT (KG/D)														
SUSPENDED SOLIDS														
INFLUENT (MG/L)	133.0	ND	180.0	116.0	190.0	149.0	146.0	137.0	146.0	143.0	191.0	108.0	149.0	
EFFLUENT (MG/L)	2.2	3.0	3.3	4.0	5.3	1.6	2.5	4.2	2.0	0.5	0.5	0.6	2.5	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	7.41	10.74	12.04	17.76	25.70	7.29	9.45	16.63	7.66	2.10	2.46	2.64	10.33	
LOADING LIMIT (KG/D)														
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.2	7.1	5.8	4.8	4.6	4.5	5.7	6.4	6.2	6.4	5.2	5.9	5.7	
EFFLUENT (MG/L)	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.2	
CONCENTRATION LIMIT (MG/L)													0.3	
LOADING (KG/D)	0.33	0.35	0.73	0.88	0.97	0.91	0.75	0.79	1.14	1.26	0.98	0.88	0.83	
LOADING LIMIT (KG/D)													3.62	

SUMMARY

PARM	CRITERIA	LOADING	COMPLIES WITH CONC	COMPLIES WITH LOADING
BOD	10.0 MG/L	NA	YES	NA
SS	NA	NA	NA	NA
TP	0.3 MG/L	3.62 KG/D	YES	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - HAS NO CRITERIA
TP - ASSESSED ANNUALLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : GEORGINA
PLANT : KESWICK WPCP
WORKS NUMBER : 120001755
TREATMENT : EXTENDED AERATION
: PHOSPHORUS REMOVAL-CONTINUOUS
:
DESIGN CAPACITY : 12.07 (1000 M3)

REGION : CENTRAL
DISTRICT : YORK, REG. MUN.
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : COOK BAY(L.SIMCOE)
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 8,000

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	3.37	3.58	3.65	4.44	4.85	4.56	3.78	3.96	3.83	4.20	4.92	4.41	4.13	
BOD5														
INFLUENT (MG/L)	104.0	116.0	99.0	89.0	92.0	72.0	105.0	114.0	132.0	174.0	113.0	109.0	109.9	
EFFLUENT (MG/L)	2.3	0.5	0.9	0.7	0.5	0.5	0.4	0.3	0.6	0.3	0.3	0.3	0.6	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	7.75	1.79	3.28	3.10	2.42	2.28	1.51	1.18	2.29	1.26	1.47	1.32	2.48	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	133.0	ND	180.0	116.0	190.0	149.0	146.0	137.0	146.0	143.0	191.0	108.0	149.0	
EFFLUENT (MG/L)	2.2	3.0	3.3	4.0	5.3	1.6	2.5	4.2	2.0	0.5	0.5	0.6	2.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	7.41	10.74	12.04	17.76	25.70	7.29	9.45	16.63	7.66	2.10	2.46	2.64	10.33	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.2	7.1	5.8	4.8	4.6	4.5	5.7	6.4	6.2	6.4	5.2	5.9	5.7	
EFFLUENT (MG/L)	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.2	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	0.33	0.35	0.73	0.88	0.97	0.91	0.75	0.79	1.14	1.26	0.98	0.88	0.83	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NO REMEDIAL MEASURES REPORTED

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED ANNUALLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : GEORGINA
PLANT : SUTTON WPCP
WORKS NUMBER : 110001168
TREATMENT : SUTTON PROCESS
: PHOSPHORUS REMOVAL CONTINUOUS
: SEASONAL DISCHARGE
DESIGN CAPACITY : 2.04 (1000 M3)

REGION : CENTRAL
DISTRICT : YORK, REG. MUN.
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : BLACK RIVER
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 2,650

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.13	1.13	1.31	1.50	1.82	2.04	1.83	1.79	1.48	1.36	0.94	0.94	1.44	
BOD5														
INFLUENT (MG/L)	183.0	ND	185.0	112.0	ND	80.0	ND	153.0	66.0	68.0	387.0	115.0	149.9	
EFFLUENT (MG/L)	4.5	2.9	2.5	1.7	ND	8.7	ND	19.1	6.4	ND	0.8	1.7	5.4	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	5.08	3.27	3.27	2.55	ND	17.74	ND	34.18	9.47	ND	0.75	1.59	7.78	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	120.0	ND	186.0	120.0	ND	101.0	ND	179.0	98.0	166.0	139.0	125.0	137.1	
EFFLUENT (MG/L)	1.4	5.0	2.5	4.0	ND	12.4	ND	29.0	2.5	ND	9.3	2.4	7.6	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	1.58	5.65	3.27	6.00	ND	25.29	ND	51.91	3.70	ND	8.74	2.25	10.94	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.5	ND	7.2	ND	ND	5.5	ND	9.5	6.7	7.1	6.5	6.8	7.0	
EFFLUENT (MG/L)		0.1	0.1	ND	ND	0.5	ND	1.3	2.2	ND	0.3	0.1	0.6	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)		0.11	0.13	ND	ND	1.02	ND	2.32	3.25	ND	0.28	0.09	0.86	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NO REMEDIAL MEASURES REPORTED

NOTE:
BOD - HAS NO CRITERIA
SS - HAS NO CRITERIA
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : GRAVENHURST
PLANT : GRAVENHURST WPCP (DUAL OPERATION)
WORKS NUMBER : 120000809
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: EXTENDED AERATION
: PHOSPHORUS REMOVAL-CONTINUOUS
DESIGN CAPACITY : 3.04 (1000 M3)

REGION : CENTRAL
DISTRICT : MUSKOKA, DIST. MUN.
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : MUSKOKA LAKE
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 4,782

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	2.25	2.10	2.48	2.89	2.63	2.46	2.13	2.02	1.90	1.96	2.29	2.23	2.28	
BOD5														
INFLUENT (MG/L)	58.0	118.0	40.0	106.0	86.0	160.0	129.0	ND	157.0	154.0	170.0	172.0	122.7	
EFFLUENT (MG/L)	4.0	6.6	3.1	2.4	2.7	0.5	8.4	ND	7.3	3.6	5.6	3.3	4.3	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	9.00	13.86	7.68	6.93	7.10	1.23	17.89	ND	13.87	7.05	12.82	7.35	9.80	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	89.0	122.0	60.0	112.0	107.0	191.0	136.0	79.0	124.0	167.0	151.0	159.0	124.8	
EFFLUENT (MG/L)	16.0	44.0	13.0	6.5	1.5	4.5	3.0	4.0	2.5	2.4	9.5	4.4	9.3	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	36.00	92.40	32.24	18.78	3.94	11.07	6.39	8.08	4.75	4.70	21.75	9.81	21.20	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	5.2	4.6	3.4	5.1	4.6	7.1	6.6	4.4	7.3	6.2	5.6	6.9	5.6	
EFFLUENT (MG/L)	0.4	0.3	0.6	0.2	ND	0.1	0.2	0.2	0.2	0.1	0.2	0.2	0.2	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	0.90	0.63	1.48	0.57	ND	0.24	0.42	0.40	0.38	0.19	0.45	0.44	0.46	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES

	START DATE	END DATE	ANTICIPATED COMPLIANCE
COLLECTION SYSTEM - COLLECTION SYSTEM UNDER REVIEW			
FACILITY EXPANSION/UPGRADING - ENGINEERING STUDY PHASE	1987	1992	1992
FACILITY EXPANSION/UPGRADING - APPLICATION FOR FUNDING			

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : HALTON HILLS
PLANT : ACTON WPCP + LAGOON
WORKS NUMBER : 1290010?3
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL CONTINUOUS
: EFFLUENT POLISHING
DESIGN CAPACITY : 4.54 (1000 M3)

REGION : CENTRAL
DISTRICT : HALTON, REG. MUN.
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : BLACK CREEK
MINOR BASIN : ONTARIO
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 7,478

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	2.70	2.50	2.60	2.90	2.80	3.20	2.50	2.30	2.40	2.50	2.20	2.20	2.57	
BOD5														
INFLUENT (MG/L)	193.0	120.0	223.0	153.0	115.0	107.0	98.0	127.0	ND	160.0	140.0	135.0	142.8	
EFFLUENT (MG/L)	1.3	1.0	1.1	1.1	2.1	0.3	0.5	0.3	0.3	0.9	1.2	1.0	0.9	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	3.51	2.50	2.86	3.19	5.88	0.96	1.25	0.69	0.72	2.25	2.64	2.20	2.31	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	245.0	159.0	130.0	188.0	180.0	115.0	139.0	141.0	ND	189.0	166.0	148.0	163.6	
EFFLUENT (MG/L)	4.5	4.8	3.9	3.6	4.6	1.9	2.5	1.0	1.7	2.1	4.7	5.8	3.4	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	12.15	12.00	10.14	10.44	12.88	6.08	6.25	2.30	4.08	5.25	10.34	12.76	8.74	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.0	6.2	7.3	6.9	5.9	5.6	5.6	7.3	ND	7.2	8.0	8.5	6.8	
EFFLUENT (MG/L)	0.3	0.3	0.3	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.7	0.5	0.3	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	0.81	0.75	0.78	0.58	0.84	0.64	0.50	0.46	0.48	0.50	1.54	1.10	0.77	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : HALTON HILLS
PLANT : GEORGETOWN WPCP
WORKS NUMBER : 110000294
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL-CONTINUOUS
: EFFLUENT POLISHING
DESIGN CAPACITY : 13.63 (1000 M3)

REGION : CENTRAL
DISTRICT : HALTON, REG. MUN.
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : SILVER CREEK
MINOR BASIN : ONTARIO
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 20,100

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	9.25	8.49	9.63	9.75	8.97	9.70	8.60	8.70	8.80	8.90	10.28	9.29	9.20	
BOD5														
INFLUENT (MG/L)	190.0	232.0	240.0	147.0	130.0	160.0	143.0	ND	121.0	147.0	145.0	175.0	166.4	
EFFLUENT (MG/L)	0.4	3.2	3.4	0.8	0.4	1.6	0.8	3.2	1.4	1.2	1.8	1.4	1.6	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	3.70	27.16	32.74	7.80	3.58	15.52	6.88	27.84	12.32	10.68	18.50	13.00	14.72	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	279.0	297.0	180.0	256.0	201.0	285.0	282.0	ND	122.0	227.0	317.0	203.0	240.8	
EFFLUENT (MG/L)	2.3	2.8	3.2	5.5	5.4	3.7	5.2	5.5	4.9	7.7	6.8	10.2	5.3	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	21.27	23.77	30.81	53.62	48.43	35.89	44.72	47.85	43.12	68.53	69.90	94.75	48.76	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	9.4	11.6	9.4	10.9	8.4	7.7	11.2	ND	12.3	9.3	11.6	13.6	10.5	
EFFLUENT (MG/L)	0.4	0.2	0.4	0.3	0.2	0.1	0.4	1.7*	0.4	0.4	0.2	ND	0.4	1
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	3.70	1.69	3.85	2.92	1.79	0.97	3.44	14.79	3.52	3.56	2.05	ND	3.68	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	NO

NO REMEDIAL MEASURES REPORTED

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : HASTINGS
PLANT : HASTINGS WPCP
WORKS NUMBER : 110001827
TREATMENT : OXIDATION DITCH
: PHOSPHORUS REMOVAL CONTINUOUS
:
DESIGN CAPACITY : 1.05 (1000 M3)

REGION : CENTRAL
DISTRICT : NORTHUMBERLAND
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : TRENT RIVER
MINOR BASIN : ONTARIO
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 959

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.30	0.62	0.65	1.11	1.12	0.99	0.80	0.59	0.77	0.94	0.84	0.65	0.87	
BOD5														
INFLUENT (MG/L)	236.5	62.0	46.0	67.0	30.0	62.0	90.5	80.0	56.0	66.5	45.0	94.5	78.0	
EFFLUENT (MG/L)	9.6	7.5	11.0	6.5	2.5	0.5	0.8	0.8	0.2	3.7	3.1	8.3	4.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	12.48	4.65	7.15	7.21	2.80	0.49	0.64	0.47	0.15	3.47	2.60	5.39	3.92	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	349.5	97.0	75.0	90.0	75.5	79.0	172.5	116.5	61.0	82.5	442.0	74.0	142.9	
EFFLUENT (MG/L)	11.8	13.6	16.5	20.0	10.0	8.7	5.8	6.8	9.0	12.5	6.3	8.0	10.8	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	15.34	8.43	10.72	22.20	11.20	8.61	4.64	4.01	6.93	11.75	5.29	5.20	9.40	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.4	3.8	2.4	4.1	2.0	2.2	3.7	3.7	2.1	2.5	2.0	3.5	3.2	
EFFLUENT (MG/L)	0.4	0.3	0.4	0.6	0.3	0.2	0.2	0.3	0.3	0.5	0.3	0.6	0.4	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	0.52	0.18	0.26	0.66	0.33	0.19	0.16	0.17	0.23	0.47	0.25	0.39	0.35	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : HAVELOCK
PLANT : HAVELOCK LAGOON
WORKS NUMBER : 110001765
TREATMENT : CONVENTIONAL LAGOON SEASONAL
: PHOSPHORUS REMOVAL - BATCH
:
DESIGN CAPACITY : 0.58 (1000 M3)

REGION : CENTRAL
DISTRICT : PETERBOROUGH
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : PLATO CREEK
MINOR BASIN : ONTARIO
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 1,362

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.74	0.79	0.76	0.92	0.89	0.93	0.75	0.69	0.74	0.78	0.96	0.86	0.82	
LAGOON DISCHARGE	ND	ND	ND	ND	139.20	ND	ND	ND	ND	ND	ND	ND	139.20	
BOD5														
INFLUENT (MG/L)	86.3	152.0	83.5	122.0	76.0	26.0	99.5	130.5	141.5	110.0	66.5	90.0	98.7	
EFFLUENT (MG/L)	ND	ND	ND	ND	12.8	ND	ND	ND	5.0	4.7	3.5	ND	6.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	11.39	ND	ND	ND	3.70	3.66	3.36	ND	5.33	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	102.7	147.0	141.0	177.0	69.0	55.5	108.5	142.5	107.5	167.0	60.5	112.5	115.9	
EFFLUENT (MG/L)	ND	ND	ND	ND	15.4	ND	ND	ND	6.0	2.2	2.4	ND	6.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	13.70	ND	ND	ND	4.44	1.71	2.30	ND	5.33	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	4.7	7.0	5.6	5.7	3.5	2.2	6.1	6.5	5.6	6.2	3.1	5.7	5.2	
EFFLUENT (MG/L)	ND	ND	ND	ND	0.5	ND	ND	ND	0.5	0.7	0.5	ND	0.6	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	ND	0.44	ND	ND	ND	0.37	0.54	0.48	ND	0.49	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NO REMEDIAL MEASURES REPORTED

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : HUNTSVILLE
PLANT : HUNTSVILLE WPCP
WORKS NUMBER : 110000547
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHOROS REMOVAL-CONTINUOUS
:
DESIGN CAPACITY : 4.54 (1000 M3)

REGION : CENTRAL
DISTRICT : MUSKOKA, DIST. MUN.
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : MUSKOKA RIVER
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 3,016

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	3.54	3.31	4.48	5.57	4.80	4.40	3.96	3.55	4.21	3.84	4.49	4.03	4.18	
BOD5														
INFLUENT (MG/L)	165.0	129.0	97.0	85.0	82.0	82.0	88.0	158.0	137.0	169.0	110.0	140.0	120.2	
EFFLUENT (MG/L)	4.9	2.2	2.1	3.0	1.0	8.5	2.8	4.5	2.1	2.0	2.7	4.1	3.3	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	17.34	7.28	9.40	16.71	4.80	37.40	11.08	15.97	8.84	7.68	12.12	16.52	13.79	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	89.0	144.0	78.0	96.0	196.0	153.0	159.0	195.0	124.0	141.0	84.0	120.0	131.6	
EFFLUENT (MG/L)	6.6	7.0	9.0	13.6	14.0	6.2	4.4	7.7	4.7	7.1	10.9	9.2	8.4	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	23.36	23.17	40.32	75.75	67.20	27.28	17.42	27.33	19.78	27.26	48.94	37.07	35.11	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.1	5.9	5.1	4.6	5.4	4.2	13.4	7.1	33.1	6.0	4.6	5.1	8.4	
EFFLUENT (MG/L)	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.3	0.2	0.3	0.4	0.3	0.3	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	0.70	0.66	0.89	1.67	0.96	0.88	0.79	1.06	0.84	1.15	1.79	1.20	1.25	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES

	START DATE	END DATE	ANTICIPATED COMPLIANCE
FACILITY EXPANSION/UPGRADING - FINAL DESIGN PHASE			

1989 CERTIFICATE OF APPROVAL ASSESSMENT

MUNICIPALITY : INNISFIL
PLANT : INNISFIL (ALCONA) WPCP
WORKS NUMBER : 110002586
TREATMENT : EXTENDED AERATION
: PHOSPHORUS REMOVAL-CONTINUOUS
: EFFLUENT POLISHING
DESIGN CAPACITY : 7.27 (1000 M3)

REGION : CENTRAL
DISTRICT : SIMCOE
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : LAKE SIMCOE
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 8,500

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.69	1.41	1.78	2.13	2.18	2.35	2.18	2.14	2.01	2.16	2.46	2.17	2.06	
BOD5														
INFLUENT (MG/L)	74.0	83.0	71.9	95.2	188.5	136.0	151.0	312.0	103.0	105.5	110.5	146.5	131.4	
EFFLUENT (MG/L)	1.9	0.5	1.2	0.5	0.7	0.5	1.1	0.7	1.4	0.3	0.3	0.9	0.8	
CONCENTRATION LIMIT (MG/L)													10.0	
LOADING (KG/D)	3.21	0.70	2.13	1.06	1.52	1.17	2.39	1.49	2.81	0.64	0.73	1.95	1.65	
LOADING LIMIT (KG/D)													71.85	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	82.0	173.5	117.8	113.0	293.5	308.0	207.0	604.0	134.0	132.5	107.7	171.5	203.7	
EFFLUENT (MG/L)	1.7	2.5	4.0	3.3	5.0	3.5	3.0	4.0	2.8	1.1	0.6	0.5	2.7	
CONCENTRATION LIMIT (MG/L)													15.0	
LOADING (KG/D)	2.87	3.52	7.12	7.02	10.90	8.22	6.54	8.56	5.62	2.37	1.47	1.08	5.56	
LOADING LIMIT (KG/D)													107.78	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	3.9	4.9	2.9	3.4	8.6	5.8	6.3	8.8	5.5	5.3	4.3	7.2	5.6	
EFFLUENT (MG/L)	0.1		0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.2	0.1	0.1	0.1	
CONCENTRATION LIMIT (MG/L)													0.3	
LOADING (KG/D)	0.16		0.17	0.21	0.21	0.23	0.21	0.42	0.60	0.43	0.24	0.21	0.21	
LOADING LIMIT (KG/D)													2.16	

SUMMARY

PARM	CRITERIA	LOADING	COMPLIES WITH CONC	COMPLIES WITH LOADING
BOD	10.0 MG/L	71.85 KG/D	YES	YES
SS	15.0 MG/L	107.78 KG/D	YES	YES
TP	0.3 MG/L	2.16 KG/D	YES	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED ANNUALLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : INNISFIL
PLANT : INNISFIL (ALCONA) WPCP
WORKS NUMBER : 110002586
TREATMENT : EXTENDED AERATION
: PHOSPHORUS REMOVAL CONTINUOUS
: EFFLUENT POLISHING
DESIGN CAPACITY : 7.27 (1000 M3)

REGION : CENTRAL
DISTRICT : SIMCOE
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : LAKE SIMCOE
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 8,500

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.69	1.41	1.78	2.13	2.18	2.35	2.18	2.14	2.01	2.16	2.46	2.17	2.06	
BOD5														
INFLUENT (MG/L)	74.0	83.0	71.9	95.2	188.5	136.0	151.0	312.0	103.0	105.5	110.5	146.5	131.4	
EFFLUENT (MG/L)	1.9	0.5	1.2	0.5	0.7	0.5	1.1	0.7	1.4	0.3	0.3	0.9	0.8	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	3.21	0.70	2.13	1.06	1.52	1.17	2.39	1.49	2.81	0.64	0.73	1.95	1.65	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	82.0	173.5	117.8	113.0	293.5	308.0	207.0	604.0	134.0	132.5	107.7	171.5	203.7	
EFFLUENT (MG/L)	1.7	2.5	4.0	3.3	5.0	3.5	3.0	4.0	2.8	1.1	0.6	0.5	2.7	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	2.87	3.52	7.12	7.02	10.90	8.22	6.54	8.56	5.62	2.37	1.47	1.08	5.56	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	3.9	4.9	2.9	3.4	8.6	5.8	6.3	8.8	5.5	5.3	4.3	7.2	5.6	
EFFLUENT (MG/L)	0.1		0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.2	0.1	0.1	0.1	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	0.16		0.17	0.21	0.21	0.23	0.21	0.42	0.60	0.43	0.24	0.21	0.21	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED ANNUALLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : LAKEFIELD
PLANT : LAKEFIELD LAGOON
WORKS NUMBER : 110001462
TREATMENT : CONVENTIONAL LAGOON SEASONAL
: PHOSPHORUS REMOVAL-CONTINUOUS
:
DESIGN CAPACITY : 1.59 (1000 M3)

REGION : CENTRAL
DISTRICT : PETERBOROUGH
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : OTONABEE RIVER
MINOR BASIN : ONTARIO
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 2,318

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.65	1.55	1.62	1.89	1.97	1.93	1.36	1.24	1.24	1.64	2.26	1.80	1.68	
LAGOON DISCHARGE	ND	4.38	7.48	11.97	ND	ND	ND	ND	ND	6.03	11.80	ND	8.33	
BOD5														
INFLUENT (MG/L)	ND	ND	62.0	38.0	83.0	70.0	159.0	20.0	148.0	89.0	80.0	ND	83.2	
EFFLUENT (MG/L)	ND	ND	ND	18.8	ND	ND	ND	ND	ND	27.0	17.2	ND	21.0	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	35.53	ND	ND	ND	ND	ND	44.28	38.87	ND	35.28	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	121.0	98.0	100.0	130.0	130.0	174.0	193.0	137.0	242.0	91.0	181.0	ND	145.2	
EFFLUENT (MG/L)	ND	17.0	ND	18.0	ND	ND	ND	ND	ND	45.7	42.8	ND	30.9	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	26.35	ND	34.02	ND	ND	ND	ND	ND	74.94	96.72	ND	51.91	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	ND	ND	3.6	3.5	3.9	4.8	6.5	1.8	6.8	2.1	5.3	ND	4.3	
EFFLUENT (MG/L)	ND	ND	ND	1.1*	ND	ND	ND	ND	ND	0.9	0.8	ND	0.9	1
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	2.07	ND	ND	ND	ND	ND	1.47	1.80	ND	1.51	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	1.0 MG/L	NO

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : LINDSAY
PLANT : LINDSAY LAGOON
WORKS NUMBER : 110000583
TREATMENT : CONVENTIONAL LAGOON CONTINUOUS
: AERATED CELL
: PHOSPHORUS REMOVAL CONTINUOUS
DESIGN CAPACITY : 17.18 (1000 M3)

REGION : CENTRAL
DISTRICT : VICTORIA
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : SCUGOG RIVER
MINOR BASIN : ONTARIO
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 15,176

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	13.73	12.83	ND	ND	ND	ND	9.48	9.27	9.57	9.97	16.00	11.77	11.58	
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BOD5														
INFLUENT (MG/L)	105.0	80.0	109.0	59.0	70.0	45.0	76.0	93.0	115.0	79.0	93.0	101.0	85.4	
EFFLUENT (MG/L)	10.1	11.7	20.6	20.5	8.6	5.7	15.6	13.6	8.3	2.5	6.6	4.5	10.7	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	138.67	150.11	ND	ND	ND	ND	147.88	126.07	79.43	24.92	105.60	52.96	123.91	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	137.0	91.0	138.0	53.0	108.0	48.0	81.0	114.0	129.0	108.0	95.0	97.0	99.9	
EFFLUENT (MG/L)	8.0	17.8	22.3	33.3	6.5	4.6	41.1	17.0	11.0	13.3	13.4	6.2	16.2	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	109.84	228.37	ND	ND	ND	ND	389.62	157.59	105.27	132.60	214.40	72.97	187.60	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.3	5.4	4.4	5.2	5.1	3.8	7.5	5.5	6.5	5.9	3.1	4.8	5.3	
EFFLUENT (MG/L)	1.2*	1.7*	1.8*	0.9	0.5	0.7	0.4	0.8	0.7	0.5	0.5	0.4	0.8	3
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	16.47	21.81	ND	ND	ND	ND	3.79	7.41	6.69	4.98	8.00	4.70	9.26	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	1.0 MG/L	NO

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES	START DATE	END DATE	ANTICIPATED COMPLIANCE
EQUIPMENT/MAINTENANCE - NEW EQUIPMENT BEING INSTALLED		1990/01	
FACILITY EXPANSION/UPGRADING - CONSTRUCTION COMPLETE		1990/01	

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : METRO TORONTO
PLANT : HIGHLAND CREEK WPCP (SCARBOROUGH)
WORKS NUMBER : 120000373
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL-CONTINUOUS
:
DESIGN CAPACITY : 218.20 (1000 M3)

REGION : CENTRAL
DISTRICT : METRO TORONTO, MUN. OF
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : LAKE ONTARIO
MINOR BASIN : ONTARIO
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 310,000

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	131.00	137.10	167.40	179.90	190.50	200.20	205.80	204.90	199.90	187.30	183.30	166.70	179.50	
BOD5														
INFLUENT (MG/L)	150.0	146.0	141.0	146.0	165.0	167.0	148.0	165.0	149.0	158.0	165.0	158.0	154.8	
EFFLUENT (MG/L)	8.4	8.3	3.8	8.9	8.5	11.7	8.0	7.2	8.3	6.3	5.4	4.6	7.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	1100.40	1137.93	636.12	1601.11	1619.25	2342.34	1646.40	1475.28	1659.17	1179.99	989.82	766.82	1346.25	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	197.0	190.0	205.0	190.0	205.0	211.0	196.0	225.0	214.0	202.0	200.0	200.0	202.9	
EFFLUENT (MG/L)	19.3	17.4	18.1	20.8	26.8	26.7	25.7	27.0	27.8	21.8	19.1	21.3	22.7	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	2528.30	2385.54	3029.94	3741.92	5105.40	5345.34	5289.06	5532.30	5557.22	4083.14	3501.03	3550.71	4074.65	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	5.1	5.1	4.8	5.0	4.8	4.8	4.3	4.2	4.6	4.5	4.3	4.6	4.7	
EFFLUENT (MG/L)	0.7	0.6	0.6	0.7	0.7	0.6	0.8	0.6	0.9	0.8	0.5	0.6	0.7	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	91.70	82.26	100.44	125.93	133.35	120.12	164.64	122.94	179.91	149.84	91.65	100.02	125.65	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : METRO TORONTO
PLANT : HUMBER WPCP (ETOBICOKE)
WORKS NUMBER : 120000580
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL-CONTINUOUS
:
DESIGN CAPACITY : 409.14 (1000 M3)

REGION : CENTRAL
DISTRICT : METRO TORONTO, MUN. OF
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : LAKE ONTARIO
MINOR BASIN : ONTARIO
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 540,000

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	385.91	376.86	383.28	407.67	428.22	465.64	421.00	408.00	426.54	389.99	394.56	346.50	402.85	
BOD5														
INFLUENT (MG/L)	218.0	228.0	213.0	158.0	203.0	179.0	153.0	170.0	192.0	174.0	181.0	213.0	190.2	
EFFLUENT (MG/L)	11.0	8.2	4.1	4.7	5.3	10.8	7.4	7.6	5.4	12.0	7.5	4.3	7.4	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	4245.01	3090.25	1571.44	1916.04	2269.56	5028.91	3115.40	3100.80	2303.31	4679.88	2959.20	1489.95	2981.09	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	403.0	372.0	409.0	360.0	292.0	235.0	181.0	206.0	250.0	249.0	203.0	302.0	288.5	
EFFLUENT (MG/L)	21.3	20.2	20.2	16.9	20.0	18.9	10.9	17.1	14.2	17.9	17.4	22.0	18.1	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	8219.88	7612.57	7742.25	6889.62	8564.40	8800.59	4588.90	6976.80	6056.86	6980.82	6865.34	7623.00	7291.59	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	8.8	9.3	10.0	8.5	7.4	6.3	5.4	5.2	6.7	6.2	6.2	7.7	7.3	
EFFLUENT (MG/L)	0.9	1.0	0.7	0.6	0.8	0.8	0.6	0.7	0.7	0.7	0.6	0.7	0.7	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	347.31	376.86	268.29	244.60	342.57	372.51	252.60	285.60	298.57	272.99	236.73	242.55	282.00	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : METRO TORONTO
PLANT : MAIN WPCP (TORONTO)
WORKS NUMBER : 120000391
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL-CONTINUOUS
:
DESIGN CAPACITY : 818.28 (1000 M3)

REGION : CENTRAL
DISTRICT : METRO TORONTO, MUN. OF
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : LAKE ONTARIO
MINOR BASIN : ONTARIO
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 1,250,000

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	749.00	804.00	863.00	810.50	920.00	1033.00	737.00	724.00	633.00	704.00	683.00	687.70	779.02	
BOD5														
INFLUENT (MG/L)	182.0	189.0	181.0	187.0	201.0	187.0	168.0	163.0	207.0	281.0	210.0	184.0	195.0	
EFFLUENT (MG/L)	15.8	17.3	23.3	20.5	17.7	10.0	11.5	8.9	11.4	14.5	12.8	13.5	14.8	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	1834.20	3909.20	107.90	6615.25	6284.00	330.00	8475.50	6443.60	7216.20	208.00	8742.40	9283.95	11529.50	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	196.0	196.0	210.0	246.0	282.0	240.0	221.0	181.0	192.0	326.0	312.0	250.0	237.7	
EFFLUENT (MG/L)	9.0	14.5	26.5	21.8	16.9	10.9	16.9	13.6	10.2	21.9	15.5	10.4	15.7	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	6741.00	1658.00	2869.50	7668.90	5548.00	1259.70	2455.30	9846.40	6456.60	5417.60	586.50	7152.08	12230.61	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	5.8	5.3	5.3	5.6	6.5	5.6	5.1	4.8	5.5	6.5	5.9	5.8	5.6	
EFFLUENT (MG/L)	0.5	0.6	0.8	0.8	0.7	0.5	0.6	0.5	0.6	0.7	0.5	0.5	0.6	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	374.50	482.40	690.40	648.40	644.00	516.50	442.20	362.00	379.80	492.80	341.50	343.85	467.41	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NO REMEDIAL MEASURES REPORTED

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : METRO TORONTO
PLANT : NORTH TORONTO WPCP (EAST YORK)
WORKS NUMBER : 120000364
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL CONTINUOUS
:
DESIGN CAPACITY : 45.46 (1000 M3)

REGION : CENTRAL
DISTRICT : METRO TORONTO, MUN. OF
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : DON RIVER
MINOR BASIN : ONTARIO
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 85,000

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	36.80	34.10	30.00	33.70	35.60	36.40	36.50	34.60	36.40	37.50	37.10	36.80	35.46	
BOD5														
INFLUENT (MG/L)	279.0	260.0	240.0	175.0	130.0	157.0	123.0	138.0	117.0	113.0	121.0	108.0	163.4	
EFFLUENT (MG/L)	23.7	23.6	21.3	20.8	4.2	3.6	5.9	6.5	9.2	2.1	3.6	6.5	10.9	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	872.16	804.76	639.00	700.96	149.52	131.04	215.35	224.90	334.88	78.75	133.56	239.20	386.51	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	155.1	188.0	161.0	161.0	144.0	158.0	134.0	130.0	142.0	151.0	147.0	166.0	153.1	
EFFLUENT (MG/L)	14.4	15.0	33.7	36.7	23.8	6.9	6.9	6.2	5.7	4.5	8.3	10.0	14.3	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	529.92	511.50	1011.00	1236.79	847.28	251.16	251.85	214.52	207.48	168.75	307.93	368.00	507.08	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	5.5	5.3	5.0	5.0	4.5	4.4	3.9	3.6	4.6	4.1	4.2	5.1	4.6	
EFFLUENT (MG/L)	0.8	0.8	1.3*	1.4*	0.9	0.5	0.5	0.4	0.7	0.6	0.7	0.9	0.8	2
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	29.44	27.28	39.00	47.18	32.04	18.20	18.25	13.84	25.48	22.50	25.97	33.12	28.37	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	NO

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES	START DATE	END DATE	ANTICIPATED COMPLIANCE
COLLECTION SYSTEM - COLLECTION SYSTEM UNDER REVIEW	1989/03	1989/05	1989/05
EQUIPMENT/MAINTENANCE - NEW EQUIPMENT BEING INSTALLED	1989/03	1989/05	1989/05
FACILITY EXPANSION/UPGRADING - REMEDIAL MEASURES BEING EVALUATED	1990/01	1990/12	
FACILITY EXPANSION/UPGRADING - ENGINEERING STUDY PHASE	1989/06	1990/06	

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : MIDLAND
PLANT : MIDLAND WPCP
WORKS NUMBER : 110000463
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL-CONTINUOUS
:
DESIGN CAPACITY : 13.68 (1000 M3)

REGION : CENTRAL
DISTRICT : SIMCOE
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : MIDLAND BAY
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 12,538

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	11.51	11.03	12.68	12.62	12.43	11.91	10.28	10.70	10.74	10.76	11.37	10.15	11.35	
BOD5														
INFLUENT (MG/L)	62.0	74.0	118.0	65.0	70.0	60.0	80.0	63.0	96.0	91.0	77.0	111.0	80.6	
EFFLUENT (MG/L)	4.2	2.9	7.2	13.4	10.4	1.5	3.7	2.5	6.3	1.7	4.9	3.2	5.2	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	48.34	31.98	91.29	169.10	129.27	17.86	38.03	26.75	67.66	18.29	55.71	32.48	59.02	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	142.0	189.0	254.0	242.0	104.0	107.0	149.0	111.0	174.0	129.0	115.0	183.0	158.3	
EFFLUENT (MG/L)	7.4	7.7	9.7	9.0	6.5	3.1	5.5	5.5	6.7	5.4	5.4	8.7	6.7	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	85.17	84.93	122.99	113.58	80.79	36.92	56.54	58.85	71.95	58.10	61.39	88.30	76.05	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	4.9	5.4	5.5	5.0	3.8	3.4	5.8	4.2	5.2	5.0	3.8	7.4	5.0	
EFFLUENT (MG/L)	0.6	0.4	0.5	0.4	0.4	0.4	0.8	0.7	0.4	0.5	1.3*	0.6	0.6	1
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	6.90	4.41	6.34	5.04	4.97	4.76	8.22	7.49	4.29	5.38	14.78	6.09	6.81	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	NO

NO REMEDIAL MEASURES REPORTED

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : MILLBROOK
PLANT : MILLBROOK WPCP
WORKS NUMBER : 110002238
TREATMENT : EXTENDED AERATION
: PHOSPHORUS REMOVAL CONTINUOUS
:
DESIGN CAPACITY : 1.13 (1000 M3)

REGION : CENTRAL
DISTRICT : PETERBOROUGH
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : BAXTER CREEK
MINOR BASIN : ONTARIO
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 1,026

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.93	0.81	0.79	0.99	1.12	0.97	0.80	0.80	0.81	0.91	1.18	0.86	0.91	
BOD5														
INFLUENT (MG/L)	60.5	136.0	125.0	62.0	86.0	117.0	124.0	109.0	115.0	209.0	104.0	96.0	112.0	
EFFLUENT (MG/L)	5.8	3.1	6.4	4.8	6.0	5.2	7.4	5.2	3.8	3.6	4.5	5.9	5.1	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	5.39	2.51	5.05	4.75	6.72	5.04	5.92	4.16	3.07	3.27	5.31	5.07	4.64	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	85.7	114.0	224.0	86.0	80.0	170.0	128.0	122.0	130.0	178.0	93.0	66.0	123.1	
EFFLUENT (MG/L)	7.8	6.0	11.5	10.5	7.6	6.0	5.0	5.8	6.5	3.0	2.2	3.7	6.3	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	7.25	4.86	9.08	10.39	8.51	5.82	4.00	4.64	5.26	2.73	2.59	3.18	5.73	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	3.5	5.1	6.1	3.9	2.2	5.0	ND	5.3	7.0	8.2	5.7	5.1	5.2	
EFFLUENT (MG/L)	0.2	0.2	0.3	0.4	0.2	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.2	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	0.18	0.16	0.23	0.39	0.22	0.09	0.08	0.16	0.16	0.09	0.11	0.08	0.18	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : MILTON
PLANT : MILTON WPCP
WORKS NUMBER : 120001014
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL-CONTINUOUS
: EFFLUENT POLISHING
DESIGN CAPACITY : 12.91 (1000 M3)

REGION : CENTRAL
DISTRICT : HALTON, REG. MUN.
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : OAKVILLE CREEK
MINOR BASIN : ONTARIO
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 23,203

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	9.90	9.30	10.40	10.50	10.00	10.80	8.90	9.20	9.30	10.00	11.00	9.70	9.92	
BOD5														
INFLUENT (MG/L)	300.0	194.0	296.0	245.0	127.0	177.0	270.0	323.0	290.0	177.0	157.0	195.0	229.3	
EFFLUENT (MG/L)	1.8	2.0	3.2	1.5	0.6	1.0	0.5	0.3	0.6	0.3	2.5	0.7	1.3	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	17.82	18.60	33.28	15.75	6.00	10.80	4.45	2.76	5.58	3.00	27.50	6.79	12.90	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	182.0	156.0	211.0	199.0	171.0	165.0	253.0	191.0	176.0	200.0	153.0	135.0	182.7	
EFFLUENT (MG/L)	3.3	6.0	5.6	2.6	2.4	2.3	2.3	1.6	3.1	4.3	2.9	4.0	3.4	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	32.67	55.80	58.24	27.30	24.00	24.84	20.47	14.72	28.83	43.00	31.90	38.80	33.73	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	5.4	8.5	8.0	6.0	6.0	6.9	9.2	7.3	7.8	8.1	7.3	7.0	7.3	
EFFLUENT (MG/L)	0.2	0.5	0.3	0.3	0.2	0.2	0.1	0.2	0.2	0.3	0.2	0.2	0.2	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	1.98	4.65	3.12	3.15	2.00	2.16	0.89	1.84	1.86	3.00	2.20	1.94	1.98	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 CERTIFICATE OF APPROVAL ASSESSMENT

MUNICIPALITY : MISSISSAUGA
PLANT : CLARKSON WPCP SOUTH PEEL SYSTEM
WORKS NUMBER : 110001328
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL CONTINUOUS
:
DESIGN CAPACITY : 109.10 (1000 M3)

REGION : CENTRAL
DISTRICT : PEEL, REG. MUN.
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : LAKE ONTARIO
MINOR BASIN : ONTARIO
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 150,000

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	76.85	75.51	82.92	85.70	83.15	92.23	84.61	88.69	86.02	86.29	91.40	81.78	84.60	
BOD:														
INFLUENT (MG/L)	228.6	213.5	144.5	174.6	171.9	169.7	157.3	148.3	169.8	177.6	157.3	168.3	173.5	
EFFLUENT (MG/L)	15.1	16.2	19.5	9.1	16.0	13.1	13.0	5.6	9.4	9.9	10.3	10.7	12.3	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	1160.43	1223.26	1616.94	779.87	1330.40	1208.21	1099.93	496.66	808.58	854.27	941.42	875.04	1040.58	
LOADING LIMIT (KG/D)													2725.00	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	226.8	197.3	213.3	201.4	159.6	162.2	177.8	291.0	149.1	124.3	157.2	217.4	189.8	
EFFLUENT (MG/L)	9.3	10.4	14.3	11.3	14.9	9.6	8.7	6.7	11.1	9.6	11.0	10.4	10.6	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	714.70	785.30	1185.75	968.41	1238.93	885.40	736.10	594.22	954.82	828.38	1005.40	850.51	896.76	
LOADING LIMIT (KG/D)													2725.00	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	8.8	8.5	7.5	6.3	7.3	7.7	6.7	6.5	6.5	6.6	6.4	6.2	7.1	
EFFLUENT (MG/L)	0.9	1.0	0.8	0.8	1.0	0.9	0.8	1.0	1.0	0.7	0.8	0.7	0.9	
CONCENTRATION LIMIT (MG/L)													1.0	
LOADING (KG/D)	69.16	75.51	66.33	68.56	83.15	83.00	67.68	88.69	86.02	60.40	73.12	57.24	76.14	
LOADING LIMIT (KG/D)													109.00	

SUMMARY

PARM	CRITERIA	LOADING	COMPLIES WITH CONC	COMPLIES WITH LOADING
BOD	25.0 MG/L	2725.00 KG/D	YES	YES
SS	25.0 MG/L	2725.00 KG/D	YES	YES
TP	1.0 MG/L	109.00 KG/D	YES	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED ANNUALLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : MISSISSAUGA
PLANT : CLARKSON WPCP SOUTH-PEEL SYSTEM
WORKS NUMBER : 110001328
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL-CONTINUOUS
:
DESIGN CAPACITY : 109.10 (1000 M3)

REGION : CENTRAL
DISTRICT : PEEL, REG. MUN.
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : LAKE ONTARIO
MINOR BASIN : ONTARIO
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 150,000

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	76.85	75.51	82.92	85.70	83.15	92.23	84.61	88.69	86.02	86.29	91.40	81.78	84.60	
BOD5														
INFLUENT (MG/L)	228.6	213.5	144.5	174.6	171.9	169.7	157.3	148.3	169.8	177.6	157.3	168.3	173.5	
EFFLUENT (MG/L)	15.1	16.2	19.5	9.1	16.0	13.1	13.0	5.6	9.4	9.9	10.3	10.7	12.3	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	1160.43	1223.26	1616.94	779.87	1330.40	1208.21	1099.93	496.66	808.58	854.27	941.42	875.04	1040.58	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	226.8	197.3	213.3	201.4	159.6	162.2	177.8	291.0	149.1	124.3	157.2	217.4	189.8	
EFFLUENT (MG/L)	9.3	10.4	14.3	11.3	14.9	9.6	8.7	6.7	11.1	9.6	11.0	10.4	10.6	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	714.70	785.30	1185.75	968.41	1238.93	885.40	736.10	594.22	954.82	828.38	1005.40	850.51	896.76	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	8.8	8.5	7.5	6.3	7.3	7.7	6.7	6.5	6.5	6.6	6.4	6.2	7.1	
EFFLUENT (MG/L)	0.9	1.0	0.8	0.8	1.0	0.9	0.8	1.0	1.0	0.7	0.8	0.7	0.9	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	69.16	75.51	66.33	68.56	83.15	83.00	67.68	88.69	86.02	60.40	73.12	57.24	76.14	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED ANNUALLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : MISSISSAUGA
PLANT : LAKEVIEW WPCP SOUTH PEEL SYSTEM
WORKS NUMBER : 1100001284
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL-CONTINUOUS
:
DESIGN CAPACITY : 284.12 (1000 M3)

REGION : CENTRAL
DISTRICT : PEEL, REG. MUN.
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : LAKE ONTARIO
MINOR BASIN : ONTARIO
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 470,000

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	246.12	242.33	254.69	269.78	274.47	285.95	253.31	258.41	257.69	247.45	273.71	252.36	259.69	
BODS														
INFLUENT (MG/L)	293.1	285.7	245.6	ND	ND	ND	284.0	273.6	217.0	250.1	237.7	279.9	263.0	
EFFLUENT (MG/L)	31.0	23.1	18.9	ND	ND	ND	ND	31.3	21.3	20.3	31.9	27.9	25.7	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	7629.72	5597.82	4813.64	ND	ND	ND	ND	8088.23	5488.79	5023.23	8731.34	7040.84	6674.03	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	278.9	281.5	272.0	330.1	257.5	269.8	246.4	261.1	218.0	246.0	265.8	280.4	267.3	
EFFLUENT (MG/L)	7.9	14.2	18.0	17.5	15.1	21.5	11.4	9.3	7.7	12.2	22.0	10.6	14.0	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	1944.34	3441.08	4584.42	4721.15	4144.49	6147.92	2887.73	2403.21	1984.21	3018.89	6021.62	2675.01	3635.66	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	7.3	8.3	6.8	7.4	7.0	6.0	6.0	6.8	6.1	5.8	7.1	7.3	6.8	
EFFLUENT (MG/L)	0.4	0.8	0.8	0.5	0.8	1.0	0.9	1.0	0.7	0.9	1.0	0.7	0.8	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	98.44	193.86	203.75	134.89	219.57	285.95	227.97	258.41	180.38	222.70	273.71	176.65	207.75	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	INSUFFICIENT DATA
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : MUSKOKA LAKES
PLANT : BALA WPCP
WORKS NUMBER : 120000792
TREATMENT : COMMUNAL SEPTIC TANK
: PHOSPHORUS REMOVAL-CONTINUOUS
: EFFLUENT FILTRATION
DESIGN CAPACITY : 0.09 (1000 M3)

REGION : CENTRAL
DISTRICT : MUSKOKA, DIST. MUN.
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : LONG LAKE
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 113

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.07	0.04	0.09	0.10	0.11	0.10	0.07	0.08	0.63	0.03	0.06	0.05	0.12	
BOD5														
INFLUENT (MG/L)	25.0	36.0	35.0	31.0	19.0	131.0	72.0	140.0	76.0	30.0	76.0	124.0	66.3	
EFFLUENT (MG/L)	5.0	0.5	0.5	1.2	4.1	2.9	9.9	4.5	5.2	2.1	4.4	4.7	3.8	
LOADING (KG/D)	0.35	0.02	0.04	0.12	0.45	0.29	0.69	0.36	3.27	0.06	0.26	0.23	0.46	
PERCENT REMOVAL	80	99	99	96	78	98	86	97	93	93	94	96	94	
PERCENT REMOVAL LIMITS													50	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	36.0	34.0	33.0	39.0	24.0	59.0	56.0	106.0	54.0	32.0	34.0	55.0	46.8	
EFFLUENT (MG/L)	15.9	12.0	38.9	40.5	14.8	66.7	39.5	11.8	14.4	10.6	13.0	36.2	26.2	
LOADING (KG/D)	1.11	0.48	3.50	4.05	1.62	6.67	2.76	0.94	9.07	0.31	0.78	1.81	3.14	
PERCENT REMOVAL	56	65	ND	ND	38	ND	29	89	73	67	62	34	44*	
PERCENT REMOVAL LIMITS													70	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	1.6	2.0	2.0	2.8	1.5	6.5	5.5	4.6	3.6	1.0	4.3	2.4	3.2	
EFFLUENT (MG/L)	0.1		0.2	0.1	0.3	0.4	0.6	0.2	0.1	0.1		0.2	0.2	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)			0.01	0.01	0.03	0.04	0.04	0.01	0.06			0.01	0.02	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	50%	YES
SS	70%	NO
TP	1.0 MG/L	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES	START DATE	END DATE	ANTICIPATED COMPLIANCE
FACILITY EXPANSION/UPGRADING - ENGINEERING STUDY PHASE	1988	1991	1991

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : MUSKOKA LAKES
PLANT : PORT CARLING WPCP
WORKS NUMBER : 110002229
TREATMENT : EXTENDED AERATION
: PHOSPHOROUS REMOVAL CONTINUOUS
: EFFLUENT POLISHING
DESIGN CAPACITY : 0.54 (1000 M3)

REGION : CENTRAL
DISTRICT : MUSKOKA, DIST. MUN.
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : INDIAN RIVER
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 700

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.20	0.19	0.25	0.12	0.23	0.24	0.29	0.12	0.10	0.74	0.08	0.07	0.22	
BOD5														
INFLUENT (MG/L)	113.0	135.0	51.0	66.0	78.0	125.0	219.0	218.0	73.0	107.0	42.0	62.0	107.4	
EFFLUENT (MG/L)	1.4	0.5	0.9	0.5	0.5	0.5	0.9	0.5	0.3	0.8	0.6	0.2	0.6	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	0.28	0.09	0.22	0.06	0.11	0.12	0.26	0.06	0.03	0.59	0.04	0.01	0.13	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	114.0	165.0	83.0	91.0	85.0	126.0	168.0	122.0	190.0	105.0	51.0	79.0	114.9	
EFFLUENT (MG/L)	2.5	3.5	3.3	0.5	0.5	2.0	5.8	10.0	2.5	0.5	4.3	1.3	3.1	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	0.50	0.66	0.82	0.06	0.11	0.48	1.68	1.20	0.25	0.37	0.34	0.09	0.68	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	7.0	6.6	4.0	5.9	5.6	5.4	7.3	7.1	8.8	6.4	3.8	5.0	6.1	
EFFLUENT (MG/L)	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.2	0.1	0.3	0.1	0.2	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	0.02	0.01	0.02	0.01	0.02	0.04	0.05	0.03	0.02	0.07	0.02		0.04	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : NEWCASTLE
PLANT : GRAHAM CREEK WPCP (NEWCASTLE)
WORKS NUMBER : 110001569
TREATMENT : EXTENDED AERATION
:
:
DESIGN CAPACITY : 1.81 (1000 M3)

REGION : CENTRAL
DISTRICT : DURHAM, REG. MUN.
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : LAKE ONTARIO
MINOR BASIN : ONTARIO
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 1,866

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.18	1.06	1.04	1.58	1.88	1.65	1.13	1.13	1.23	1.16	2.39	1.53	1.41	
BOD5														
INFLUENT (MG/L)	ND	210.0	128.0	39.0	94.0	94.0	179.0	88.0	98.0	151.0	55.0	96.0	112.0	
EFFLUENT (MG/L)	8.8	22.7	23.0	14.5	7.0	7.0	11.0	7.8	7.4	22.4	38.9	33.9	17.0	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	10.38	24.06	23.92	22.91	13.16	11.55	12.43	8.81	9.10	25.98	92.97	51.86	23.97	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	122.0	290.0	138.0	61.0	123.0	123.0	175.0	138.0	153.0	133.0	49.0	180.0	140.4	
EFFLUENT (MG/L)	11.3	11.9	13.0	12.3	14.3	14.2	16.3	19.3	18.5	12.1	13.9	17.9	14.6	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	13.33	12.61	13.52	19.43	26.88	23.43	18.41	21.80	22.75	14.03	33.22	27.38	20.59	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	ND	10.5	8.6	2.5	5.7	5.7	6.8	4.5	6.9	6.4	2.8	5.6	6.0	
EFFLUENT (MG/L)	1.4	1.5	2.7	1.4	0.7	0.8	1.3	1.2	1.5	0.4	1.4	1.0	1.3	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	1.65	1.59	2.80	2.21	1.31	1.32	1.46	1.35	1.84	0.46	3.34	1.53	1.83	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	NA	NA

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : NEWCASTLE
PLANT : PORT DARLINGTON WPCP
WORKS NUMBER : 120003076
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL CONTINUOUS
:
DESIGN CAPACITY : 4.54 (1000 M3)

REGION : CENTRAL
DISTRICT : DURHAM, REG. MUN.
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : LAKE ONTARIO
MINOR BASIN : ONTARIO
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 12,831

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	7.60	7.16	7.39	9.07	9.43	8.86	7.65	7.99	8.81	9.92	10.21	7.86	8.50	
BODS														
INFLUENT (MG/L)	ND	140.0	144.0	113.0	43.0	52.0	339.0	60.0	163.0	45.0	21.0	149.0	115.4	
EFFLUENT (MG/L)	10.6	25.3	13.1	5.5	4.1	23.7	17.1	12.9	4.9	11.8	39.5	36.4	17.1	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	80.56	181.14	96.80	49.88	38.66	209.98	130.81	103.07	43.16	117.05	403.29	286.10	145.35	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	158.0	160.0	160.0	134.0	35.0	83.0	580.0	47.0	179.0	44.0	26.0	152.0	146.5	
EFFLUENT (MG/L)	11.0	14.8	15.3	12.2	14.8	23.0	10.8	7.6	9.6	12.0	12.6	15.0	13.2	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	83.60	105.96	113.06	110.65	139.56	203.78	82.62	60.72	84.57	119.04	128.64	117.90	112.20	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	5.3	5.2	5.3	4.0	4.8	6.1	7.9	6.5	6.3	4.5	3.9	4.9	5.4	
EFFLUENT (MG/L)	0.7	0.7	0.9	0.5	0.6	0.9	0.9	0.7	0.8	0.4	0.6	0.9	0.7	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	5.32	5.01	6.65	4.53	5.65	7.97	6.88	5.59	7.04	3.96	6.12	7.07	5.95	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES

	START DATE	END DATE	ANTICIPATED COMPLIANCE
FACILITY EXPANSION/UPGRADING - FINAL DESIGN PHASE	1989/01	1990/04	

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : NORWOOD
PLANT : NORWOOD WPCP
WORKS NUMBER : 110001499
TREATMENT : OXIDATION DITCH
: PHOSPHORUS REMOVAL-CONTINUOUS
:
DESIGN CAPACITY : 0.72 (1000 M3)

REGION : CENTRAL
DISTRICT : PETERBOROUGH
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : OUSE RIVER
MINOR BASIN : ONTARIO
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 1,135

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.55	0.55	0.55	0.55	0.55	0.51	0.46	0.44	0.46	0.50	0.66	0.59	0.53	
BOD5														
INFLUENT (MG/L)	101.0	192.5	114.0	152.0	119.0	122.0	119.0	124.0	155.5	122.0	130.0	141.0	132.7	
EFFLUENT (MG/L)	6.9	12.4	7.6	5.0	2.1	3.4	1.0	1.2	1.1	4.8	5.0	21.0	6.0	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	3.79	6.82	4.18	2.75	1.15	1.73	0.46	0.52	0.50	2.40	3.30	12.39	3.18	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	126.5	363.0	226.0	187.0	178.0	163.0	165.5	127.0	221.5	149.0	196.5	156.5	188.3	
EFFLUENT (MG/L)	6.4	7.0	8.5	6.5	3.5	10.0	2.5	3.5	3.5	4.1	4.6	7.4	5.6	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	3.52	3.85	4.67	3.57	1.92	5.10	1.15	1.54	1.61	2.05	3.03	4.36	2.97	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	7.3	7.5	8.3	7.9	6.6	6.2	6.6	5.7	8.9	7.0	6.5	6.4	7.1	
EFFLUENT (MG/L)	0.7	0.7	0.9	0.4	0.7	0.9	0.6	0.6	0.6	0.7	0.5	0.7	0.7	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	0.38	0.38	0.49	0.22	0.38	0.45	0.27	0.26	0.27	0.35	0.33	0.41	0.37	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NO REMEDIAL MEASURES REPORTED

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : OAKVILLE
PLANT : SOUTH EAST WPCP
WORKS NUMBER : 120000998
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL CONTINUOUS
:
DESIGN CAPACITY : 22.73 (1000 M3)

REGION : CENTRAL
DISTRICT : HALTON, REG. MUN.
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : LAKE ONTARIO
MINOR BASIN : ONTARIO
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 21,900

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	17.30	16.80	16.60	18.10	17.10	18.80	18.80	20.50	20.40	20.70	23.50	20.50	19.09	
BOD5														
INFLUENT (MG/L)	170.0	313.0	155.0	71.0	115.0	83.0	83.0	71.0	120.0	123.0	125.0	82.0	125.9	
EFFLUENT (MG/L)	6.4	5.0	8.7	11.0	9.3	5.0	5.0	9.2	2.0	1.2	5.8	4.1	6.1	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	110.72	84.00	144.42	199.10	159.03	94.00	94.00	188.60	40.80	24.84	136.30	84.05	116.45	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	195.0	147.0	101.0	132.0	184.0	117.0	117.0	53.0	97.0	88.0	145.0	133.0	125.8	
EFFLUENT (MG/L)	7.2	5.6	12.0	13.0	13.4	9.9	9.9	9.4	4.0	4.4	8.0	8.0	8.7	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	124.56	94.08	199.20	235.30	229.14	186.12	186.12	192.70	81.60	91.08	188.00	164.00	166.08	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.0	5.9	5.6	5.0	5.8	4.7	4.7	4.6	4.4	5.8	6.3	6.0	5.4	
EFFLUENT (MG/L)	0.7	0.6	0.9	0.7	0.6	1.0	1.0	0.9	0.3	0.3	0.4	0.8	0.7	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	12.11	10.08	14.94	12.67	10.26	18.80	18.80	18.45	6.12	6.21	9.40	16.40	13.36	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NO REMEDIAL MEASURES REPORTED

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : OAKVILLE
PLANT : SOUTH WEST WPCP
WORKS NUMBER : 120001005
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL-CONTINUOUS
:
DESIGN CAPACITY : 47.73 (1000 M3)

REGION : CENTRAL
DISTRICT : HALTON, REG. MUN.
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : LAKE ONTARIO
MINOR BASIN : ONTARIO
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 58,200

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	31.10	29.30	33.70	38.30	40.32	41.99	33.34	36.16	36.62	36.59	41.78	32.98	36.02	
BOD5														
INFLUENT (MG/L)	290.0	222.0	330.0	128.0	219.0	219.0	303.0	216.0	187.0	200.0	236.0	380.0	244.2	
EFFLUENT (MG/L)	4.5	4.3	6.1	4.7	7.0	7.0	7.0	3.6	5.2	6.5	2.5	6.2	5.4	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	139.95	125.99	205.57	180.01	282.24	293.93	233.38	130.17	190.42	237.83	104.45	204.47	194.51	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	236.0	135.0	315.0	171.0	209.0	209.0	277.0	165.0	165.0	83.0	310.0	167.0	203.5	
EFFLUENT (MG/L)	8.2	10.7	11.3	9.8	10.1	10.1	10.0	8.9	8.8	7.4	3.2	13.0	9.3	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	255.02	313.51	380.81	375.34	407.23	424.09	333.40	321.82	322.25	270.76	133.69	428.74	334.99	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	7.4	8.6	8.2	5.7	6.5	4.1	6.1	7.0	7.4	6.6	7.9	6.4	6.8	
EFFLUENT (MG/L)	0.7	0.7	0.8	0.9	0.7	0.8	0.9	0.7	0.9	1.0	0.6	0.8	0.8	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	21.77	20.51	26.96	34.47	28.22	33.59	30.00	25.31	32.95	36.59	25.06	26.38	28.82	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NO REMEDIAL MEASURES REPORTED

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : OMEMEE
PLANT : OMEMEE LAGOON
WORKS NUMBER : 110001630
TREATMENT : LAGOON AND SPRAY
: NO DISCHARGE
:
DESIGN CAPACITY : 0.61 (1000 M3)

REGION : CENTRAL
DISTRICT : VICTORIA
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : NO DISC.TO SURFACE WATER
MINOR BASIN : ONTARIO
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 653

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.26	0.24	0.29	0.37	0.41	0.29	0.20	0.22	0.22	0.36	0.61	0.34	0.32	
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BOD5														
INFLUENT (MG/L)	126.0	161.0	182.0	97.0	88.0	280.0	242.0	255.0	171.0	174.0	97.0	110.0	165.3	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
SUSPENDED SOLIDS														
INFLUENT (MG/L)	66.0	297.0	318.0	145.0	120.0	154.0	191.0	218.0	107.0	156.0	89.0	92.0	162.8	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.8	15.0	9.7	4.5	4.5	15.0	15.0	11.3	8.1	8.1	5.2	5.9	9.1	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	NA	NO DIRECT DISCHARGE
SS	NA	NO DIRECT DISCHARGE
TP	NA	NO DIRECT DISCHARGE

NOTE:
BOD - HAS NO CRITERIA
SS - HAS NO CRITERIA
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 CERTIFICATE OF APPROVAL ASSESSMENT

MUNICIPALITY : ORILLIA
PLANT : ORILLIA WPCP
WORKS NUMBER : 120000569
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL-CONTINUOUS
:
DESIGN CAPACITY : 21.04 (1000 M3)

REGION : CENTRAL
DISTRICT : SIMCOE
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : LAKE SIMCOE
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 24,000

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	18.73	16.96	21.60	27.80	22.84	20.51	16.75	16.87	18.35	18.99	25.92	18.18	20.29	
BOD5														
INFLUENT (MG/L)	120.0	166.0	61.0	71.0	86.0	94.0	137.0	91.0	136.0	106.0	ND	90.0	105.3	
EFFLUENT (MG/L)	9.7	10.8	6.1	7.8	3.9	9.3	18.7	13.0	29.8	21.0	7.6	25.2	13.6	
CONCENTRATION LIMIT (MG/L)													15.0	
LOADING (KG/D)	181.68	183.16	131.76	216.84	89.07	190.74	313.22	219.31	546.83	398.79	196.99	458.13	275.94	
LOADING LIMIT (KG/D)														
SUSPENDED SOLIDS														
INFLUENT (MG/L)	166.0	169.0	130.0	112.0	162.0	179.0	209.0	179.0	222.0	175.0	103.0	92.0	158.2	
EFFLUENT (MG/L)	17.9	11.5	14.0	16.0	8.2	6.0	4.4	6.5	10.3	10.0	9.7	19.5	11.2	
CONCENTRATION LIMIT (MG/L)													15.0	
LOADING (KG/D)	335.26	195.04	302.40	444.80	187.28	123.06	73.70	109.65	189.00	189.90	251.42	354.51	227.25	
LOADING LIMIT (KG/D)														
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	4.1	5.0	2.4	2.7	3.2	4.1	4.1	2.7	4.4	4.9	1.3	5.1	3.7	
EFFLUENT (MG/L)	0.6	0.4	0.3	0.3	0.3	0.3	0.2	0.3	0.4	0.3	0.3	0.5	0.4*	
CONCENTRATION LIMIT (MG/L)													0.3	
LOADING (KG/D)	11.23	6.78	6.48	8.34	6.85	6.15	3.35	5.06	7.34	5.69	7.77	9.09	8.12	
LOADING LIMIT (KG/D)														

SUMMARY

PARM	CRITERIA	LOADING	COMPLIES WITH CONC	COMPLIES WITH LOADING
BOD	15.0 MG/L	NA	YES	NA
SS	15.0 MG/L	NA	YES	NA
TP	0.3 MG/L	NA	NO	NA

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED ANNUALLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES

	START DATE	END DATE	ANTICIPATED COMPLIANCE
FACILITY EXPANSION/UPGRADING - CONSTRUCTION INITIATED			

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : ORILLIA
PLANT : ORILLIA WPCP
WORKS NUMBER : 120000669
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL CONTINUOUS
:
DESIGN CAPACITY : 21.04 (1000 M3)

REGION : CENTRAL
DISTRICT : SIMCOE
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : LAKE SIMCOE
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 24,000

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	18.73	16.96	21.60	27.80	22.84	20.51	16.75	16.87	18.35	18.99	25.92	18.18	20.29	
BOD5														
INFLUENT (MG/L)	120.0	166.0	61.0	71.0	86.0	94.0	137.0	91.0	136.0	106.0	ND	90.0	105.3	
EFFLUENT (MG/L)	9.7	10.8	6.1	7.8	3.9	9.3	18.7	13.0	29.8	21.0	7.6	25.2	13.6	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	181.68	183.16	131.76	216.84	89.07	190.74	313.22	219.31	546.83	398.79	196.99	458.13	275.94	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	166.0	169.0	130.0	112.0	162.0	179.0	209.0	179.0	222.0	175.0	103.0	92.0	158.2	
EFFLUENT (MG/L)	17.9	11.5	14.0	16.0	8.2	6.0	4.4	6.5	10.3	10.0	9.7	19.5	11.2	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	335.26	195.04	302.40	444.80	187.28	123.06	73.70	109.65	189.00	189.90	251.42	354.51	227.25	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	4.1	5.0	2.4	2.7	3.2	4.1	4.1	2.7	4.4	4.9	1.3	5.1	3.7	
EFFLUENT (MG/L)	0.6	0.4	0.3	0.3	0.3	0.3	0.2	0.3	0.4	0.3	0.3	0.5	0.4	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	11.23	6.78	6.48	8.34	6.85	6.15	3.35	5.06	7.34	5.69	7.77	9.09	8.12	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES

	START DATE	END DATE	ANTICIPATED COMPLIANCE
FACILITY EXPANSION/UPGRADING - CONSTRUCTION INITIATED			

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : OSHAWA
PLANT : HARMONY CR WPCP NO 1
WORKS NUMBER : 120000774
TREATMENT : TRICKLING FILTER
: PHOSPHORUS REMOVAL-CONTINUOUS
:
DESIGN CAPACITY : 34.09 (1000 M3)

REGION : CENTRAL
DISTRICT : DURHAM, REG. MUN.
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE :
MINOR BASIN : ONTARIO
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 102,938

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	18.38	17.46	16.90	21.72	17.63	22.65	19.00	18.61	18.58	19.34	ND	24.58	19.53	
BOD5														
INFLUENT (MG/L)	168.0	104.0	99.0	92.0	124.0	171.0	146.0	131.0	137.0	130.0	89.0	167.0	129.8	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
SUSPENDED SOLIDS														
INFLUENT (MG/L)	292.0	173.0	210.0	132.0	212.0	317.0	219.0	144.0	138.0	175.0	89.0	251.0	196.0	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	4.9	6.2	2.7	4.8	4.7	5.7	5.1	5.7	5.8	6.3	3.1	10.1	5.4	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	NO DIRECT DISCHARGE
SS	25.0 MG/L	NO DIRECT DISCHARGE
TP	1.0 MG/L	NO DIRECT DISCHARGE

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : OSHAWA
PLANT : HARMONY CR WPCP NO 2
WORKS NUMBER : 120001667
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHOROUS REMOVAL CONTINUOUS
:
DESIGN CAPACITY : 54.09 (1000 M3)

REGION : CENTRAL
DISTRICT : DURHAM, REG. MUN.
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE :
MINOR BASIN : ONTARIO
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 51,469

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	25.72	28.60	28.69	28.91	34.84	27.49	23.88	22.93	25.07	29.89	35.28	27.55	28.24	
BODS														
INFLUENT (MG/L)	190.0	177.0	158.0	140.0	133.0	184.0	426.0	153.0	161.0	110.0	65.0	192.0	174.1	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
SUSPENDED SOLIDS														
INFLUENT (MG/L)	178.0	264.0	52.0	118.0	168.0	162.0	564.0	116.0	147.0	93.0	78.0	225.0	180.4	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	7.1	9.4	8.3	8.0	5.0	7.5	8.2	8.5	8.4	6.9	3.7	8.7	7.5	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	NO DIRECT DISCHARGE
SS	25.0 MG/L	NO DIRECT DISCHARGE
TP	1.0 MG/L	NO DIRECT DISCHARGE

NO REMEDIAL MEASURES REPORTED

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : OSHAWA
PLANT : HARMONY CREEK 1&2 COMBINED EFFLUENT
WORKS NUMBER : 120003254
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: TRICKLING FILTER
: PHOSPHORUS REMOVAL-CONTINUOUS
DESIGN CAPACITY : 0.00 (1000 M3)

REGION : CENTRAL
DISTRICT : DURHAM, REG. MUN.
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : L ONT.(COMBINED EFF.1&2)
MINOR BASIN : ONTARIO
MAJOR BASIN : GREAT LAKES
POPULATION SERVED :

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	44.09	46.06	45.60	50.63	52.48	50.14	42.88	41.55	43.66	49.23	63.49	52.12	48.49	
BOD5														
INFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
EFFLUENT (MG/L)	17.7	24.5	25.6	14.7	13.8	18.0	41.7	39.6	26.0	35.1	27.4	33.7	26.5*	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	780.39	1128.47	1167.36	744.26	724.22	902.52	1788.09	1645.38	1135.16	1727.97	1739.62	1756.44	1284.99	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
EFFLUENT (MG/L)	17.0	17.3	22.4	14.6	17.7	21.9	16.5	21.1	13.5	16.8	15.8	21.2	18.0	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	749.53	796.83	1021.44	739.19	928.89	1098.06	707.52	876.70	589.41	827.06	1003.14	1104.94	872.82	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
EFFLUENT (MG/L)	0.8	0.9	0.9	0.7	0.9	0.9	1.0	1.0	0.9	0.9	0.8	1.3*	0.9	1
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	35.27	41.45	41.04	35.44	47.23	45.12	42.88	41.55	39.29	44.30	50.79	67.75	43.64	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	NO
SS	25.0 MG/L	YES
TP	1.0 MG/L	NO

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES	START DATE	END DATE	ANTICIPATED COMPLIANCE
COLLECTION SYSTEM - ENFORCING SEWER-USE BYLAWS		1990/12	1990/01
OPERATIONAL/PROCESS - PHOSPHORUS REMOVAL BEING UPGRADED		1990/01	1990/01
EQUIPMENT/MAINTENANCE - EXISTING EQUIPMENT BEING REPAIRED	1990/07	1990/08	1990/01

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : PENETANGUISHENE
PLANT : FOX ST. WPCP
WORKS NUMBER : 120001960
TREATMENT : CONTACT STABILIZATION
: PHOSPHORUS REMOVAL CONTINUOUS
:
DESIGN CAPACITY : 1.50 (1000 M3)

REGION : CENTRAL
DISTRICT : SIMCOE
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : PENETANGUISHENE HARBOUR
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 2,100

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.13	1.06	1.30	1.31	1.22	1.16	1.05	0.91	0.97	1.03	1.18	1.04	1.11	
BOD5														
INFLUENT (MG/L)	91.0	113.0	82.0	73.0	96.0	93.0	106.0	166.0	94.0	80.0	94.0	72.0	96.7	
EFFLUENT (MG/L)	8.2	4.4	2.5	10.7	10.3	2.1	4.1	1.0	3.7	3.5	2.2	2.8	4.6	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	9.26	4.66	3.25	14.01	12.56	2.43	4.30	0.91	3.58	3.60	2.59	2.91	5.11	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	58.0	133.0	104.0	84.0	156.0	15.0	151.0	180.0	113.0	101.0	134.0	100.0	110.8	
EFFLUENT (MG/L)	13.7	12.0	6.0	25.0	9.5	2.0	8.5	2.5	12.0	10.5	2.7	5.6	9.2	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	15.48	12.72	7.80	32.75	11.59	2.32	8.92	2.27	11.64	10.81	3.18	5.82	10.21	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	4.3	5.2	4.0	3.2	4.7	5.0	5.4	6.1	4.4	3.8	3.3	14.2	5.3	
EFFLUENT (MG/L)	1.1*	0.5	0.4	0.4	0.5	0.5	0.6	0.6	0.9	0.8	0.5	0.5	0.6	1
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	1.24	0.53	0.52	0.52	0.61	0.58	0.63	0.54	0.87	0.82	0.59	0.52	0.67	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	NO

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES

START DATE	END DATE	ANTICIPATED COMPLIANCE
COLLECTION SYSTEM - COLLECTION SYSTEM UNDER REVIEW		
OPERATIONAL/PROCESS - OPERATIONAL PROCEDURES BEING UPGRADED		
FACILITY EXPANSION/UPGRADING - REMEDIAL MEASURES BEING EVALUATED		
FACILITY EXPANSION/UPGRADING - APPLICATION FOR FUNDING		

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : PENETANGUISHENE
PLANT : PENETANGUISHENE WPCP MAIN ST PLANT I1
WORKS NUMBER : 120000541
TREATMENT : CONTACT STABILIZATION
: PHOSPHORUS REMOVAL-CONTINUOUS
:
DESIGN CAPACITY : 3.00 (1000 M3)

REGION : CENTRAL
DISTRICT : SIMCOE
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : PENETANG BAY
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 4,800

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	ND	2.16	9.93	3.11	3.01	2.84	2.59	2.13	3.48	2.59	2.99	2.67	3.41	
BOD5														
INFLUENT (MG/L)	ND	92.0	ND	80.0	75.0	117.0	125.0	145.0	178.0	5.0	99.0	103.0	101.9	
EFFLUENT (MG/L)	ND	1.2	ND	7.6	4.9	7.8	10.8	8.2	6.8	2.0	15.7	5.6	7.1	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	2.59	ND	23.63	14.74	22.15	27.97	17.46	23.66	5.18	46.94	14.95	24.21	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	ND	124.0	ND	120.0	104.0	148.0	142.0	129.0	146.0	272.0	125.0	123.0	143.3	
EFFLUENT (MG/L)	ND	3.0	ND	12.3	5.5	6.8	7.8	5.5	16.1	3.0	8.1	4.0	7.2	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	6.48	ND	38.25	16.55	19.31	20.20	11.71	56.02	7.77	24.21	10.68	24.55	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	ND	4.0	ND	3.0	3.5	4.8	4.4	5.3	4.1	5.3	4.1	4.7	4.3	
EFFLUENT (MG/L)	ND	0.6	ND	0.4	0.6	0.7	0.5	1.0	1.7*	0.6	1.8*	0.5	0.8	2
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	1.29	ND	1.24	1.80	1.98	1.29	2.13	5.91	1.55	5.38	1.33	2.73	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	NO

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : PERCY
PLANT : WARKWORTH LAGOON
WORKS NUMBER : 120001933
TREATMENT : CONVENTIONAL LAGOON SEASONAL
: PHOSPHORUS REMOVAL - BATCH
:
DESIGN CAPACITY : 0.39 (1000 M3)

REGION : CENTRAL
DISTRICT : NORTHUMBERLAND
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : MILL CREEK
MINOR BASIN : ONTARIO
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 457

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.26	0.24	0.26	0.27	0.32	0.32	0.25	0.24	0.25	0.27	0.32	0.32	0.28	
LAGOON DISCHARGE	ND	ND	ND	ND	14.60	ND	ND	ND	ND	ND	ND	ND	14.60	
BOD5														
INFLUENT (MG/L)	250.0	91.0	118.0	50.0	70.0	70.0	90.0	116.0	84.0	52.0	108.0	104.0	100.3	
EFFLUENT (MG/L)	ND	ND	ND	ND	4.4	ND	ND	ND	ND	ND	ND	ND	4.4	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	1.40	ND	ND	ND	ND	ND	ND	ND	1.23	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	96.0	120.0	170.0	80.0	99.0	99.0	87.0	79.0	81.0	55.0	99.0	101.0	97.2	
EFFLUENT (MG/L)	ND	ND	ND	ND	29.0	ND	ND	ND	ND	ND	ND	ND	29.0	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	9.28	ND	ND	ND	ND	ND	ND	ND	8.12	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	8.9	ND	ND	3.0	5.8	5.8	4.2	6.5	5.6	5.6	5.9	7.5	5.9	
EFFLUENT (MG/L)	ND	ND	ND	ND	0.6	ND	ND	ND	ND	ND	ND	ND	0.6	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	ND	0.19	ND	ND	ND	ND	ND	ND	ND	0.17	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	NO
TP	1.0 MG/L	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : PETERBOROUGH
PLANT : PETERBOROUGH WPCP
WORKS NUMBER : 120000676
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL-CONTINUOUS
:
DESIGN CAPACITY : 68.19 (1000 M3)

REGION : CENTRAL
DISTRICT : PETERBOROUGH
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : OTONABEE RIVER
MINOR BASIN : ONTARIO
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 62,945

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	45.62	44.20	46.44	53.20	56.76	59.13	50.52	50.07	53.88	50.98	64.70	48.99	52.04	
BOD5														
INFLUENT (MG/L)	118.0	118.0	142.0	122.0	98.0	78.0	87.0	92.0	101.0	98.0	92.0	116.0	105.2	
EFFLUENT (MG/L)	11.7	13.7	13.1	11.2	6.1	6.8	3.8	5.6	6.0	6.5	20.1	17.7	10.2	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	533.75	605.54	608.36	595.84	346.23	402.08	191.97	280.39	323.28	331.37	1300.47	867.12	530.81	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	146.0	143.0	177.0	128.0	113.0	100.0	126.0	142.0	ND	114.0	98.0	109.0	126.9	
EFFLUENT (MG/L)	9.0	10.0	11.0	11.0	7.0	5.0	4.0	4.0	12.0	9.0	9.0	16.0	8.9	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	410.58	442.00	510.84	585.20	397.32	295.65	202.08	200.28	646.56	458.82	582.30	783.84	463.16	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	5.3	4.8	4.9	4.4	3.4	3.7	4.0	4.1	4.3	4.3	3.6	4.3	4.3	
EFFLUENT (MG/L)	0.9	1.0	1.0	1.0	0.8	1.0	1.0	1.0	0.9	1.0	0.8	1.0	1.0	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	41.05	44.20	46.44	53.20	45.40	59.13	50.52	50.07	48.49	50.98	51.76	48.99	52.04	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : PICKERING
PLANT : DUFFIN CREEK WPCP (YORK-DURHAM)
WORKS NUMBER : 120001915
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL CONTINUOUS
:
DESIGN CAPACITY : 181.84 (1000 M3)

REGION : CENTRAL
DISTRICT : DURHAM, REG. MUN.
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : LAKE ONTARIO
MINOR BASIN : ONTARIO
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 64,386

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	187.41	184.69	187.90	102.32	213.52	218.62	188.21	197.69	208.04	206.72	233.04	196.01	193.68	
BOD5														
INFLUENT (MG/L)	158.0	183.0	193.0	171.0	179.0	144.0	162.0	177.0	194.0	172.0	117.0	142.0	166.0	
EFFLUENT (MG/L)	20.6	21.2	21.9	20.4	26.5	27.6	13.9	27.1	27.7	31.6	30.5	32.6	25.1*	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	3860.64	3915.42	4115.01	2087.32	5658.28	6033.91	2616.11	5357.39	5762.70	6532.35	7107.72	6389.92	4861.37	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	282.0	284.0	289.0	295.0	273.0	238.0	269.0	305.0	243.0	254.0	190.0	184.0	258.8	
EFFLUENT (MG/L)	16.5	15.7	16.5	12.0	21.6	19.7	24.7	19.0	18.3	17.9	47.0	17.2	20.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	3092.26	2899.63	3100.35	1227.84	4612.03	4306.81	4648.78	3756.11	3807.13	3700.28	952.88	3371.37	3970.44	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	7.8	6.4	6.6	6.1	5.2	6.4	7.1	6.1	6.2	6.5	5.6	6.0	6.3	
EFFLUENT (MG/L)	0.8	0.6	1.0	0.5	1.0	1.0	0.9	1.0	0.9	1.0	1.3*	0.6	0.9	1
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	149.92	110.81	187.90	51.16	213.52	218.62	169.38	197.69	187.23	206.72	302.95	117.60	174.31	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	NO
SS	25.0 MG/L	YES
TP	1.0 MG/L	NO

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES	START DATE	END DATE	ANTICIPATED COMPLIANCE
OPERATIONAL/PROCESS - CONDUCTING TREATABILITY STUDIES	1989/08	1990/01	
FACILITY EXPANSION/UPGRADING - CONSTRUCTION INITIATED	1989	1992	1990/01

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : PORT HOPE
PLANT : PORT HOPE WPCP
WORKS NUMBER : 120000079
TREATMENT : HIGH RATE
: PHOSPHORUS REMOVAL-CONTINUOUS
:
DESIGN CAPACITY : 9.09 (1000 M3)

REGION : CENTRAL
DISTRICT : NORTHUMBERLAND
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : LAKE ONTARIO
MINOR BASIN : ONTARIO
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 9,700

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	4.42	3.98	4.93	6.75	6.63	6.32	4.54	4.43	4.84	5.08	7.56	4.14	5.30	
BOD5														
INFLUENT (MG/L)	186.0	162.0	193.0	164.0	178.0	162.0	129.0	110.0	96.0	113.0	94.0	82.0	139.1	
EFFLUENT (MG/L)	17.5	19.1	19.8	13.3	8.5	6.3	5.1	2.7	2.6	3.0	2.3	4.6	8.7	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	77.35	76.01	97.61	89.77	56.35	39.81	23.15	11.96	12.58	15.24	17.38	19.04	46.11	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	100.0	93.0	114.0	88.0	100.0	111.0	92.0	109.0	100.0	116.0	92.0	86.0	100.1	
EFFLUENT (MG/L)	10.9	10.3	10.3	10.3	7.4	4.0	5.6	6.1	5.9	5.9	6.3	4.1	7.3	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	48.17	40.99	50.77	69.52	49.06	25.28	25.42	27.02	28.55	29.97	47.62	16.97	38.69	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	2.7	3.1	3.6	2.7	2.7	2.9	2.7	2.9	2.9	2.9	2.6	2.8	2.9	
EFFLUENT (MG/L)	0.6	0.8	1.0	0.8	0.6	0.6	0.8	0.5	1.0	1.0	0.6	0.8	0.8	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	2.65	3.18	4.93	5.40	3.97	3.79	3.63	2.21	4.84	5.08	4.53	3.31	4.24	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NO REMEDIAL MEASURES REPORTED

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : PORT MCNICOLL
PLANT : PORT MCNICOLL WPCP
WORKS NUMBER : 110001417
TREATMENT : CONTACT STABILIZATION
: PHOSPHORUS REMOVAL-CONTINUOUS
:
DESIGN CAPACITY : 1.04 (1000 M3)

REGION : CENTRAL
DISTRICT : SIMCOE
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : GEORGIAN BAY
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 1,926

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.82	0.63	0.98	1.04	0.94	0.75	0.58	0.54	0.69	0.67	1.02	0.66	0.78	
BOD5														
INFLUENT (MG/L)	60.5	105.5	93.0	58.8	84.1	81.0	56.8	118.5	94.9	69.6	97.5	87.8	84.0	
EFFLUENT (MG/L)	12.2	10.1	8.8	3.4	9.2	9.6	8.7	9.3	6.9	3.6	5.9	5.4	7.8	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	10.00	6.36	8.62	3.53	8.64	7.20	5.04	5.02	4.76	2.41	6.01	3.56	6.08	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	60.5	129.0	108.0	88.0	82.5	101.0	104.0	123.0	121.5	78.0	76.0	124.0	99.6	
EFFLUENT (MG/L)	7.9	7.5	7.0	10.0	4.8	4.3	7.3	5.0	3.8	1.1	3.8	5.3	5.7	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	6.47	4.72	6.86	10.40	4.51	3.22	4.23	2.70	2.62	0.73	3.87	3.49	4.45	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	3.8	5.9	5.8	4.0	3.0	5.6	4.9	6.1	5.0	4.7	3.8	5.1	4.8	
EFFLUENT (MG/L)	0.3	0.4	0.3	0.2	0.3	0.3	0.4	0.4	0.4	0.3	0.2	0.3	0.3	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	0.24	0.25	0.29	0.20	0.28	0.22	0.23	0.21	0.27	0.20	0.20	0.19	0.23	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : SCUGOG
PLANT : NONQUON RIVER LAGOON (PORT PERRY)
WORKS NUMBER : 110001257
TREATMENT : CONVENTIONAL LAGOON SEASONAL
: PHOSPHORUS REMOVAL-CONTINUOUS
: EFFLUENT CHLORINATION
DESIGN CAPACITY : 3.64 (1000 M3)

REGION : CENTRAL
DISTRICT : DURHAM, REG. MUN.
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : LAKE SCUGOG
MINOR BASIN : ONTARIO
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 5,215

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	2.11	1.96	2.04	2.54	2.91	2.65	1.98	1.98	2.06	2.20	3.19	2.20	2.32	
LAGOON DISCHARGE	ND	ND	ND	313.67	209.12	ND	ND	ND	ND	ND	77.14	118.61	179.64	
BOD5														
INFLUENT (MG/L)	ND	143.0	154.0	151.0	173.0	ND	158.0	413.0	178.0	150.0	62.0	155.0	173.7	
EFFLUENT (MG/L)	ND	ND	ND	14.2	7.9	ND	ND	ND	ND	ND	13.0	6.1	10.3	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	36.06	22.98	ND	ND	ND	ND	ND	41.47	13.42	23.90	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	196.0	209.0	244.0	164.0	244.0	120.0	143.0	414.0	221.0	193.0	83.0	157.0	199.0	
EFFLUENT (MG/L)	ND	ND	ND	26.3	15.3	ND	ND	ND	ND	ND	6.0	3.3	12.7	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	66.80	44.52	ND	ND	ND	ND	ND	19.14	7.26	29.46	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	ND	11.4	10.7	8.7	16.1	8.4	7.1	41.2	7.7	6.9	3.0	8.3	11.8	
EFFLUENT (MG/L)	ND	ND	ND	0.5	0.3	ND	ND	ND	ND	ND	0.2	0.1	0.3	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	1.27	0.87	ND	ND	ND	ND	ND	0.63	0.22	0.70	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES	START DATE	END DATE	ANTICIPATED COMPLIANCE
FACILITY EXPANSION/UPGRADING - ENVIRONMENTAL ASSESSMENT BEING CONDUCTED	1989/03	1989/08	

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : SMITH
PLANT : WOODLAND ACRES WPCP
WORKS NUMBER : 110002381
TREATMENT : EXTENDED AERATION
:
:
DESIGN CAPACITY : 0.36 (1000 M3)

REGION : CENTRAL
DISTRICT : PETERBOROUGH
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : OTONABEE R.
MINOR BASIN : ONTARIO
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 435

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.17	0.17	0.23	0.28	0.30	0.34	0.16	0.13	0.18	0.19	0.19	0.20	0.21	
BOD5														
INFLUENT (MG/L)	38.0	35.0	71.0	18.0	21.0	48.0	64.0	104.0	67.0	84.0	74.0	38.0	55.2	
EFFLUENT (MG/L)	10.4	3.2	2.5	1.5	1.0	1.9	0.8	0.3	0.3	0.2	3.2	4.1	2.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	1.76	0.54	0.57	0.42	0.30	0.64	0.12	0.03	0.05	0.03	0.60	0.82	0.53	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	41.0	62.0	140.0	36.0	57.0	60.0	87.0	118.0	133.0	132.0	93.0	31.0	82.5	
EFFLUENT (MG/L)	11.3	7.3	7.5	3.0	4.5	3.2	2.5	4.5	3.3	0.5	5.9	6.9	5.0	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	1.92	1.24	1.72	0.84	1.35	1.08	0.40	0.58	0.59	0.09	1.12	1.38	1.05	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	3.1	2.8	3.0	1.1	0.9	2.6	2.8	11.3	5.4	5.0	3.1	1.5	3.6	
EFFLUENT (MG/L)	3.0	1.3	0.6	0.3	0.4	0.7	0.7	0.7	0.5	0.5	0.6	0.7	0.8	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	0.51	0.22	0.13	0.08	0.12	0.23	0.11	0.09	0.09	0.09	0.11	0.14	0.17	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	NA	NA

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES

	START DATE	END DATE	ANTICIPATED COMPLIANCE
OPERATIONAL/PROCESS - PHOSPHORUS REMOVAL BEING UPGRADED			1989/03

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : STAYNER
PLANT : STAYNER LAGOON
WORKS NUMBER : 110000695
TREATMENT : AERATED CELL PLUS LAGOON
: SEASONAL DISCHARGE
: PHOSPHORUS REMOVAL - BATCH
DESIGN CAPACITY : 1.04 (1000 M3)

REGION : CENTRAL
DISTRICT : SIMCOE
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : LAMONT CREEK
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 2,975

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.86	1.50	1.65	1.82	1.65	1.50	1.30	1.23	1.15	1.32	1.45	1.41	1.49	
LAGOON DISCHARGE	46.93	41.99	51.15	112.72	76.65	ND	83.60	ND	83.60	76.65	ND	ND	71.66	
BOD5														
INFLUENT (MG/L)	293.0	883.0	166.0	662.0	370.0	858.0	822.0	218.0	351.0	799.0	1,040.0	612.0	589.5	
EFFLUENT (MG/L)	ND	ND	ND	18.3	31.8	ND	11.1	ND	11.5	17.8	ND	ND	18.1	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	33.30	52.47	ND	14.43	ND	13.22	23.49	ND	ND	26.97	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	172.0	190.0	179.0	217.0	193.0	213.0	279.0	175.0	290.0	270.0	253.0	220.0	220.9	
EFFLUENT (MG/L)	ND	ND	ND	21.7	35.0	ND	29.0	ND	23.0	22.8	ND	ND	26.3*	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	39.49	57.75	ND	37.70	ND	26.45	30.09	ND	ND	39.19	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	5.2	8.1	6.2	9.5	8.6	19.2	9.8	7.4	15.3	9.8	18.7	12.6	10.9	
EFFLUENT (MG/L)	ND	ND	ND	0.3	0.8	ND	0.3	ND	0.5	ND	ND	ND	0.5	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	0.54	1.32	ND	0.39	ND	0.57	ND	ND	ND	0.75	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	NO
TP	1.0 MG/L	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES

	START DATE	END DATE	ANTICIPATED COMPLIANCE
COLLECTION SYSTEM - COLLECTION SYSTEM UNDER REVIEW			
COLLECTION SYSTEM - INFILTRATION PROBLEMS BEING CORRECTED		1991/07	1991/08
OPERATIONAL/PROCESS - PHOSPHORUS REMOVAL BEING UPGRADED		1991/11	1991/08
OPERATIONAL/PROCESS - CONVERTING TO ALTERNATIVE PROCESS			
FACILITY EXPANSION/UPGRADING - CONSTRUCTION INITIATED			

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : TOTTENHAM
PLANT : TOTTENHAM WPCP (MUN OCT 1 1989)
WORKS NUMBER : 1100025631
TREATMENT : SUTTON PROCESS
: PHOSPHORUS REMOVAL-CONTINUOUS
:
DESIGN CAPACITY : 2.25 (1000 M3)

REGION : CENTRAL
DISTRICT : GREY
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE :
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES
POPULATION SERVED :

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.31	1.32	1.42	1.77	1.82	1.56	1.29	1.28	1.42	1.34	1.76	1.33	1.47	
BOD5														
INFLUENT (MG/L)	106.5	157.5	134.0	139.0	96.5	112.5	117.5	156.0	133.5	146.0	135.0	172.0	133.8	
EFFLUENT (MG/L)	4.1	2.2	4.8	10.4	4.2	7.2	2.3	4.8	1.8	0.8	3.5	0.2	3.9	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	5.37	2.90	6.81	18.40	7.64	11.23	2.96	6.14	2.55	1.07	6.16	0.26	5.73	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	127.5	192.0	236.0	243.5	145.0	194.0	171.5	158.5	268.5	174.0	176.0	204.0	190.9	
EFFLUENT (MG/L)	7.7	4.0	17.5	27.8	5.8	10.2	6.3	4.0	7.5	2.5	4.0	0.2	8.1	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	10.08	5.28	24.85	49.20	10.55	15.91	8.12	5.12	10.65	3.35	7.04	0.26	11.91	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	10.2	9.3	13.6	6.9	6.8	9.9	9.4	11.1	16.1	7.1	5.8	6.9	9.4	
EFFLUENT (MG/L)	0.2	0.2	0.3	0.3	0.3	0.2	0.2	0.4	0.3	0.2	0.3	0.4	0.3	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	0.26	0.26	0.42	0.53	0.54	0.31	0.25	0.51	0.42	0.26	0.52	0.53	0.44	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:
BOD - HAS NO CRITERIA
SS - HAS NO CRITERIA
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : UXBRIDGE
PLANT : UXBRIDGE BROOK WPCP
WORKS NUMBER : 120000756
TREATMENT : EXTENDED AERATION
: PHOSPHORUS REMOVAL-CONTINUOUS
: EFFLUENT POLISHING
DESIGN CAPACITY : 3.63 (1000 M3)

REGION : CENTRAL
DISTRICT : DURHAM, REG. MUN.
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : UXBRIDGE BROOK
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 4,550

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.13	0.97	1.05	1.24	1.65	1.51	1.23	1.66	1.69	1.67	3.73	2.53	1.67	
BOD5														
INFLUENT (MG/L)	186.0	271.0	140.0	131.0	75.0	184.0	122.0	164.0	198.0	166.0	87.0	172.0	158.0	
EFFLUENT (MG/L)	6.7	0.8	8.6	4.2	6.8	0.5	2.6	0.2	0.3	1.2	0.8	5.8	3.2	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	7.57	0.77	9.03	5.20	11.22	0.75	3.19	0.33	0.50	2.00	2.98	14.67	5.34	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	180.0	199.0	272.0	134.0	100.0	195.0	236.0	140.0	256.0	139.0	97.0	149.0	174.8	
EFFLUENT (MG/L)	10.0	5.5	26.5	21.5	23.5	2.3	7.5	2.5	3.0	1.4	0.5	2.4	8.9	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	11.30	5.33	27.82	26.66	38.77	3.47	9.22	4.15	5.07	2.33	1.86	6.07	14.86	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	11.5	2.6	6.2	3.6	4.0	2.6	6.4	5.6	7.3	6.2	4.0	5.7	5.5	
EFFLUENT (MG/L)	0.3	0.1	0.3	0.2	0.2	0.1	0.2	ND	0.2	0.2		0.1	0.2	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	0.33	0.09	0.31	0.24	0.33	0.15	0.24	ND	0.33	0.33		0.25	0.33	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES	START DATE	END DATE	ANTICIPATED COMPLIANCE
FACILITY EXPANSION/UPGRADING - ENVIRONMENTAL ASSESSMENT BEING CONDUCTED	1989/01	1990/03	

1989 EFFLUENT GUIDELINES ASSESSMENT

[illegible] : VAUGHAN
[illegible] : KEFFINBURG WPCP
[illegible] : 120000417
[illegible] : EXTENDED AERATION
[illegible] :
[illegible] : 0.22 (1000 M3)

REGION : CENTRAL
DISTRICT : YORK, REG. MUN.
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : HUMBER RIVER
MINOR BASIN : ONTARIO
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 900

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
[illegible] (1000 M3)	0.19	0.19	0.20	0.23	0.23	0.24	0.16	0.21	0.19	0.19	0.29	0.21	0.21	
[illegible]														
[illegible] (MG/L)	151.0	142.0	126.0	82.0	85.0	189.0	119.0	93.0	50.0	117.0	37.0	181.0	114.3	
[illegible] (MG/L)	5.9	5.6	3.2	10.6	0.7	1.8	3.2	3.7	2.8	2.4	2.6	10.4	4.4	
[illegible] LIMIT (MG/L)													25.0	
[illegible]	1.12	1.06	0.64	2.43	0.16	0.43	0.51	0.77	0.53	0.45	0.75	2.18	0.92	
[illegible] SOLIDS														
[illegible] (MG/L)	116.0	191.0	165.0	58.0	86.0	191.0	141.0	97.0	57.0	115.0	57.0	165.0	119.9	
[illegible] (MG/L)	8.2	9.3	9.2	17.5	6.8	6.1	4.0	9.3	7.5	4.3	5.0	8.7	8.0	
[illegible] LIMIT (MG/L)													25.0	
[illegible]	1.55	1.76	1.84	4.02	1.56	1.46	0.64	1.95	1.42	0.81	1.45	1.82	1.68	
[illegible]														
[illegible] (MG/L)	5.8	8.4	6.8	4.5	3.8	8.4	5.0	5.4	5.0	16.8	2.8	6.4	6.6	
[illegible] (MG/L)	4.7	4.7	4.2	3.3	3.7	4.6	3.9	4.0	3.9	3.9	2.9	3.9	4.0	
[illegible] LIMIT (MG/L)														
[illegible]	0.89	0.89	0.84	0.75	0.85	1.10	0.62	0.84	0.74	0.74	0.84	0.81	0.84	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	NA	NA

NO REMEDIAL MEASURES REPORTED

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : VICTORIA HARBOUR
PLANT : VICTORIA HARBOUR WPCP
WORKS NUMBER : 120003227
TREATMENT : EXTENDED AERATION
: PHOSPHORUS REMOVAL-CONTINUOUS
: EFFLUENT POLISHING
DESIGN CAPACITY : 2.36 (1000 M3)

REGION : CENTRAL
DISTRICT : SIMCOE
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : GEORGIAN BAY
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 2,016

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.52	0.47	0.60	0.65	0.76	0.61	0.64	0.62	0.59	0.53	0.61	0.46	0.59	
BOD5														
INFLUENT (MG/L)	94.0	61.0	82.0	43.0	65.5	73.5	96.5	120.3	131.0	92.0	59.0	82.2	83.3	
EFFLUENT (MG/L)	5.4	0.5	0.5	0.6	2.0	0.5	4.9	0.4	0.4	0.4	2.0	2.8	1.7	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	2.80	0.23	0.30	0.39	1.52	0.30	3.13	0.24	0.23	0.21	1.22	1.28	1.00	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	99.5	99.5	135.0	50.0	77.5	110.5	205.5	171.7	311.5	259.0	82.6	69.6	139.3	
EFFLUENT (MG/L)	2.0	2.5	2.5	3.5	4.8	2.4	2.8	2.5	4.0	1.9	0.5	0.7	2.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	1.04	1.17	1.50	2.27	3.64	1.46	1.79	1.55	2.36	1.00	0.30	0.32	1.48	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	3.5	3.6	4.1	2.8	2.9	4.5	5.5	5.5	5.0	4.5	3.4	3.8	4.1	
EFFLUENT (MG/L)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2		0.1	0.1	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	0.05	0.04	0.06	0.06	0.07	0.06	0.06	0.06	0.11	0.10		0.04	0.06	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : WASAGA BEACH
PLANT : WASAGA BEACH WPCP (SUM.POP.SERV.73000)
WORKS NUMBER : 1200018862
TREATMENT : EXTENDED AERATION
: EFFLUENT POLISHING
: INFILTRATION
DESIGN CAPACITY : 5.77 (1000 M3)

REGION : CENTRAL
DISTRICT : SIMCOE
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : NO DISC.TO SURFACE WATER
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 3,090

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.81	0.74	1.27	1.00	1.21	1.39	2.34	1.96	1.25	1.01	0.93	0.92	1.24	
BOD5														
INFLUENT (MG/L)	85.0	115.5	236.5	172.0	124.0	65.5	253.5	119.0	92.5	77.0	85.5	67.5	124.5	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
SUSPENDED SOLIDS														
INFLUENT (MG/L)	144.5	122.0	397.5	220.0	84.5	82.0	337.5	126.5	95.0	66.0	64.0	68.5	150.7	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	5.4	5.5	8.1	5.6	4.6	3.4	7.1	6.5	4.6	4.2	4.2	4.2	5.3	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	NA	NO DIRECT DISCHARGE
SS	25.0 MG/L	NO DIRECT DISCHARGE
TP	NA	NO DIRECT DISCHARGE

NOTE:
BOD - HAS NO CRITERIA
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : WHITBY
PLANT : CORBETT CREEK WPCP
WORKS NUMBER : 120000738
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL-CONTINUOUS
:
DESIGN CAPACITY : 36.36 (1000 M3)

REGION : CENTRAL
DISTRICT : DURHAM, REG. MUN.
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : LAKE ONTARIO
MINOR BASIN : ONTARIO
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 26,100

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	23.19	23.62	22.71	25.12	27.16	29.36	27.67	24.86	26.94	27.89	28.12	16.92	25.30	
BOD5														
INFLUENT (MG/L)	117.0	186.0	204.0	93.0	83.0	89.0	121.0	120.0	98.0	116.0	102.0	157.0	123.8	
EFFLUENT (MG/L)	10.9	18.3	22.0	9.5	12.1	12.1	18.5	4.1	16.1	18.7	17.7	32.0	16.0	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	252.77	432.24	499.62	238.64	328.63	355.25	511.89	101.92	433.73	521.54	497.72	541.44	404.80	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	172.0	294.0	296.0	220.0	155.0	118.0	118.0	131.0	218.0	214.0	159.0	177.0	189.3	
EFFLUENT (MG/L)	15.0	17.1	26.3	22.5	23.7	14.8	15.9	12.5	17.3	21.9	23.4	13.5	18.7	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	347.85	403.90	597.27	565.20	643.69	434.52	439.95	310.75	466.06	610.79	658.00	228.42	473.11	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	11.2	11.9	11.5	10.8	9.5	9.6	9.6	94.5	10.2	10.8	9.6	8.6	17.3	
EFFLUENT (MG/L)	0.8	0.8	0.9	0.8	1.0	1.0	0.7	0.8	0.8	0.9	1.0	1.0	0.9	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	18.55	18.89	20.43	20.09	27.16	29.36	19.36	19.88	21.55	25.10	28.12	16.92	22.77	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES	START DATE	END DATE	ANTICIPATED COMPLIANCE
OPERATIONAL/PROCESS - CONDUCTING TREATABILITY STUDIES	1989/07	1989/11	
FACILITY EXPANSION/UPGRADING - ENVIRONMENTAL ASSESSMENT BEING CONDUCTED	1989/10	1990/03	

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : WHITBY
PLANT : PRINGLE CREEK WPCP NO 1
WORKS NUMBER : 12000074
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL CONTINUOUS
:
DESIGN CAPACITY : 5.68 (1000 M3)

REGION : CENTRAL
DISTRICT : DURHAM, REG. MUN.
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : PRINGLE CREEK
MINOR BASIN : ONTARIO
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 10,925

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	2.96	2.65	2.67	3.81	3.62	3.31	2.05	2.70	2.54	2.24	3.25	2.51	2.86	
BOD5														
INFLUENT (MG/L)	ND	181.0	81.0	254.0	171.0	129.0	411.0	226.0	81.0	181.0	79.0	343.0	194.3	
EFFLUENT (MG/L)	11.2	8.6	16.3	14.3	18.2	7.5	33.0	4.0	16.4	9.3	34.8	5.1	14.9	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	33.15	22.79	43.52	54.48	65.88	24.82	67.65	10.80	41.65	20.83	113.10	12.80	42.61	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	485.0	609.0	522.0	344.0	401.0	439.0	438.0	581.0	545.0	668.0	448.0	614.0	507.8	
EFFLUENT (MG/L)	12.0	15.7	12.7	6.2	13.2	20.8	27.5	19.7	44.9	24.5	16.8	11.2	18.8	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	35.52	41.60	33.90	23.62	47.78	68.84	56.37	53.19	114.04	54.88	54.60	28.11	53.77	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	5.9	5.9	6.0	5.3	5.3	5.6	7.0	7.6	6.2	6.3	5.2	6.8	6.1	
EFFLUENT (MG/L)	0.6	0.7	0.4	0.6	0.5	0.6	0.5	0.6	0.7	0.5	0.4	0.5	0.6	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	1.77	1.85	1.06	2.28	1.81	1.98	1.02	1.62	1.77	1.12	1.30	1.25	1.72	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NO REMEDIAL MEASURES REPORTED

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : WHITBY
PLANT : PRINGLE CREEK WPCP NO 2
WORKS NUMBER : 120003101
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL-CONTINUOUS
:
DESIGN CAPACITY : 9.09 (1000 M3)

REGION : CENTRAL
DISTRICT : DURHAM, REG. MUN.
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : PRINGLE CREEK
MINOR BASIN : ONTARIO
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 10,925

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	4.08	3.45	3.61	5.41	5.95	4.41	2.88	4.06	3.46	3.07	5.84	3.67	4.16	
BOD5														
INFLUENT (MG/L)	ND	181.0	81.0	254.0	171.0	129.0	411.0	226.0	81.0	181.0	79.0	543.0	212.5	
EFFLUENT (MG/L)	9.1	25.6	31.4	8.5	9.3	2.5	8.3	8.0	3.1	4.9	16.1	5.6	11.0	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	37.12	88.32	113.35	45.98	55.33	11.02	23.90	32.48	10.72	15.04	94.02	20.55	45.76	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	485.0	609.0	522.0	344.0	401.0	439.0	438.0	581.0	545.0	668.0	448.0	614.0	507.8	
EFFLUENT (MG/L)	13.7	15.9	14.2	20.0	16.3	10.6	13.2	17.2	19.4	10.8	9.7	13.7	14.6	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	55.89	54.85	51.26	108.20	96.98	46.74	38.01	69.83	67.12	33.15	56.64	50.27	60.74	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	5.9	5.9	6.0	5.3	5.3	5.6	7.0	7.6	6.2	6.3	5.2	6.8	6.1	
EFFLUENT (MG/L)	0.7	0.6	0.5	0.6	0.4	0.5	0.4	0.6	0.8	0.5	0.5	0.8	0.6	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	2.85	2.07	1.80	3.24	2.38	2.20	1.15	2.43	2.76	1.53	2.92	2.93	2.50	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : WHITCHURCH STOUFFVILLE
PLANT : STOUFFVILLE WPCP
WORKS NUMBER : [illegible]
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL CONTINUOUS
: EFFLUENT ON POND
DESIGN CAPACITY : 3.86 (1000 M3)

REGION : CENTRAL
DISTRICT : YORK, REG. MUN.
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : DUFFIN CREEK
MINOR BASIN : ONTARIO
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 5,500

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	3.31	3.16	3.25	3.50	3.83	3.78	3.38	3.56	3.68	3.49	4.03	3.35	3.53	
BOD5														
INFLUENT (MG/L)	107.0	128.0	85.0	73.0	94.0	84.0	96.0	116.0	85.0	114.0	78.0	125.0	98.8	
EFFLUENT (MG/L)	3.5	3.8	4.5	3.6	1.5	3.6	1.8	3.5	0.5	0.3	1.8	1.8	2.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	11.58	12.00	14.62	12.60	5.74	13.60	6.08	12.46	1.84	1.04	7.25	6.03	8.83	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	111.0	224.0	140.0	168.0	128.0	107.0	117.0	137.0	122.0	133.0	94.0	158.0	136.6	
EFFLUENT (MG/L)	2.9	3.7	5.3	5.0	4.5	1.5	0.3	2.0	4.2	0.9	1.9	2.0	2.9	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	9.59	11.69	17.22	17.50	17.23	5.67	1.01	7.12	15.45	3.14	7.65	6.70	10.24	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	4.8	6.3	4.3	4.4	4.4	5.4	4.2	5.4	5.2	5.3	4.0	5.8	5.0	
EFFLUENT (MG/L)	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.4	0.5	0.3	0.4	0.4	0.4	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	0.99	0.94	0.97	1.05	1.53	1.13	1.01	1.42	1.84	1.04	1.61	1.34	1.41	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

Southeastern Region
4

Ministry of the Environment
Ontario

Southeastern Region 4

Ministry of the Environment
Ontario

REGIONAL OFFICE

Kingston
133 Dalton St.
Box 820
K7L 4X6
(613) 549-4000

DISTRICT OFFICES

Cornwall
205 Amelia Street
K6H 3P3
(613) 933-7402

Kingston
133 Dalton St.
K7L 4X6
(613) 549-4000

Ottawa
2378 Holly Lane
K1V 7P1
(613) 521-3450

SUB-OFFICES

Belleville
15 Victoria Ave.
K8N 1Z5
(613) 962-9208

Pembroke
1000 MacKay St.
K8B 1A3
(613) 732-3643

SOUTHEAST SUMMARY - 1989

Treatment Type	Number			Design Capacity (1000M3/D)		
	Min	Mun	Tot	Ministry	Municipal	Total
Primary	2	13	15	10.23	559.73	569.96
Conventional Activated Sludge	4	3	7	96.03	40.00	136.03
Modified Activated Sludge	1	0	1	12.27	-	12.27
Contact Stabilization	1	2	3	1.36	8.68	10.04
Extended Aeration	11	4	15	7.87	3.87	11.74
High Rate	1	0	1	5.46	-	5.46
Communal Septic Tank	1	0	1	1.74	-	1.74
Convent. Lagoon Continuous	1	1	2	2.39	5.91	8.30
Conventional Lagoon Seasonal	10	3	13	9.76	6.01	15.77
Lagoon and Spray	1	1	2	0.34	0.36	0.70
Aerated Cell Plus Lagoon	3	0	3	15.62	-	15.62
Conventional Lagoon Annual	3	1	4	3.30	1.23	4.52
TOTALS	39	28	67	166.37	625.79	792.16

1000M3/D: Thousands of cubic meters per day
ADF: Average Daily Flow

SOUTHEAST SUMMARY - 1989

Treatment Type	Number			Annual ADF (1000M3/D)		
	Min	Mun	Tot	Ministry	Municipal	Total
Primary	2	13	15	9.01	632.31	641.32
Conventional Activated Sludge	4	3	7	60.55	35.01	95.56
Modified Activated Sludge	1	0	1	7.92	0.00	7.92
Contact Stabilization	1	2	3	1.59	4.27	5.86
Extended Aeration	11	4	15	6.25	2.15	8.40
High Rate	1	0	1	4.32	0.00	4.32
Communal Septic Tank	1	0	1	0.00	0.00	0.00
Convent. Lagoon Continuous	1	1	2	2.36	5.04	7.40
Conventional Lagoon Seasonal	10	3	13	7.68	7.25	14.93
Lagoon and Spray	1	1	2	0.22	0.00	0.22
Aerated Cell Plus Lagoon	3	0	3	10.36	0.00	10.36
Conventional Lagoon Annual	3	1	4	0.85	0.44	1.29
TOTALS	39	28	67	111.11	686.47	797.58

1000M3/D: Thousands of cubic meters per day
ADF: Average Daily Flow

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : ALEXANDRIA
PLANT : ALEXANDRIA LAGOON
WORKS NUMBER : 110000846
TREATMENT : AERATED CELL PLUS LAGOON
: CONTINUOUS DISCHARGE
: PHOSPHORUS REMOVAL-CONTINUOUS
DESIGN CAPACITY : 6.81 (1000 M3)

REGION : SOUTHEAST
DISTRICT : STORMONT, DUNDAS AND GLENGARRY
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : DELISLE R
MINOR BASIN : ST. LAWRENCE
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 3,500

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	5.46	5.49	7.04	8.00	6.48	6.31	4.65	5.25	4.91	5.38	7.50	5.29	5.98	
LAGOON DISCHARGE	169.38	153.77	218.16	240.07	200.87	189.33	144.23	162.87	147.37	166.74	225.00	164.00	181.82	
BOD5														
INFLUENT (MG/L)	ND	72.0	80.0	36.0	27.0	85.0	57.0	61.0	94.0	108.0	97.0	314.0	93.7	
EFFLUENT (MG/L)	ND	42.0	43.0	16.0	5.4	12.1	15.0	4.3	8.7	10.3	12.3	13.6	16.6	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	230.58	302.72	128.00	34.99	76.35	69.75	22.57	42.71	55.41	92.25	71.94	99.27	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	71.0	90.0	54.0	45.0	72.0	51.0	56.0	64.0	82.0	57.0	3.0	5.0	54.2	
EFFLUENT (MG/L)	25.7	34.9	29.9	21.0	17.5	12.0	7.3	9.9	14.6	13.5	12.9	20.0	18.3	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	140.32	191.60	210.49	168.00	113.40	75.72	33.94	51.97	71.68	72.63	96.75	105.80	109.43	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	2.1	2.9	2.9	1.9	3.0	3.7	1.4	1.8	2.4	1.8	2.8	4.8	2.6	
EFFLUENT (MG/L)	0.5	1.0	0.9	0.7	0.7	0.6	0.4	0.5	0.2	0.5	0.6	0.7	0.6	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	2.73	5.49	6.33	5.60	4.53	3.78	1.86	2.62	0.98	2.69	4.50	3.70	3.59	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : ALFRED
PLANT : ALFRED LAGOON
WORKS NUMBER : 110001846
TREATMENT : CONVENTIONAL LAGOON ANNUAL

DESIGN CAPACITY : 0.71 (1000 M3)

REGION : SOUTHEAST
DISTRICT : PRESCOTT AND RUSSELL
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : RUISSEAU DES AIOCAS
MINOR BASIN : OTTAWA RIVER
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 1,055

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.47	0.43	0.49	0.55	0.63	0.66	0.48	0.52	0.48	0.53	0.59	0.45	0.52	
LAGOON DISCHARGE	ND	ND	ND	76.00	170.40	ND	ND	ND	ND	ND	ND	ND	123.20	
BOD														
INFLUENT (MG/L)	ND	ND	ND	ND	149.0	84.0	188.0	115.0	195.0	121.0	176.0	445.0	184.1	
EFFLUENT (MG/L)	ND	ND	ND	59.0	4.0	ND	ND	ND	ND	ND	ND	ND	31.5*	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
SUSPENDED SOLIDS														
INFLUENT (MG/L)	275.0	350.0	160.0	157.0	1,220.0	185.0	983.0	178.0	221.0	242.0	441.0	900.0	442.7	
EFFLUENT (MG/L)	ND	ND	ND	29.8	15.0	ND	ND	ND	ND	ND	ND	ND	22.4	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	5.7	5.3	7.8	4.9	7.6	5.4	10.8	8.5	15.9	5.7	4.0	16.3	8.2	
EFFLUENT (MG/L)	ND	ND	ND	5.5	2.0	ND	ND	ND	ND	ND	ND	ND	3.8	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	NO
SS	40.0 MG/L	YES
TP	NA	NA

NO REMEDIAL MEASURES REPORTED

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : ALMONTE
PLANT : ALMONTE LAGOON
WORKS NUMBER : 110000873
TREATMENT : AERATED CELL PLUS LAGOON
: SEASONAL DISCHARGE
: PHOSPHORUS REMOVAL - BATCH
DESIGN CAPACITY : 5.45 (1000 M3)

REGION : SOUTHEAST
DISTRICT : LANARK
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : MISSISSIPPI RIVER
MINOR BASIN : OTTAWA RIVER
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 4,040

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.44	1.35	2.79	3.06	2.93	1.95	1.91	1.46	1.41	1.75	3.14	2.01	2.10	
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BOD5														
INFLUENT (MG/L)	207.0	160.0	112.0	160.0	46.0	66.0	11.0	ND	76.0	122.0	48.0	365.0	124.8	
EFFLUENT (MG/L)	ND	ND	ND	ND	10.1	ND	ND	ND	ND	ND	ND	19.5	14.8	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	29.59	ND	ND	ND	ND	ND	ND	39.19	31.08	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	173.0	142.0	137.0	226.0	196.0	62.0	153.0	ND	75.0	228.0	51.0	671.0	192.2	
EFFLUENT (MG/L)	ND	ND	ND	ND	18.1	ND	ND	ND	ND	ND	ND	29.5	23.8	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	53.03	ND	ND	ND	ND	ND	ND	59.29	49.98	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	8.2	6.7	5.4	3.2	3.8	4.5	0.7	ND	6.0	7.8	5.3	21.9	6.7	
EFFLUENT (MG/L)	ND	ND	ND	ND	0.4	ND	ND	ND	ND	ND	ND	0.7	0.6	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	ND	1.17	ND	ND	ND	ND	ND	ND	1.40	1.26	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NO REMEDIAL MEASURES REPORTED

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : ARNPRIOR
PLANT : ARNPRIOR WWTP
WORKS NUMBER : 120000601
TREATMENT : PRIMARY
: PHOSPHORUS REMOVAL CONTINUOUS
:
DESIGN CAPACITY : 6.81 (1000 M3)

REGION : SOUTHEAST
DISTRICT : RENFREW
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : MADAWASKA RIVER
MINOR BASIN : OTTAWA RIVER
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 5,800

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	4.65	4.29	6.67	6.30	6.82	5.46	5.15	4.75	5.31	5.42	6.36	4.60	5.48	
BOD5														
INFLUENT (MG/L)	86.0	84.0	104.0	67.0	29.0	55.0	70.0	78.0	82.0	60.0	60.0	87.0	71.8	
EFFLUENT (MG/L)	63.0	55.5	60.0	52.0	27.0	41.5	37.5	56.0	57.0	34.5	35.0	62.5	48.5	
LOADING (KG/D)	297.95	238.09	400.20	327.60	184.14	226.59	193.12	266.00	302.67	186.99	222.60	287.50	265.78	
PERCENT REMOVAL	27	34	42	22	07	25	46	28	30	43	42	28	32*	
PERCENT REMOVAL LIMITS													50	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	90.0	64.0	95.0	73.0	61.0	57.0	73.0	68.0	55.0	69.0	49.0	63.0	68.1	
EFFLUENT (MG/L)	32.0	29.1	39.1	27.0	34.2	27.9	26.8	30.0	25.8	25.0	19.0	24.5	28.4	
LOADING (KG/D)	148.80	124.83	260.79	170.10	233.24	152.33	138.02	142.50	136.99	135.50	120.84	112.70	155.63	
PERCENT REMOVAL	64	55	59	63	44	51	63	56	53	64	61	61	58*	
PERCENT REMOVAL LIMITS													70	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	3.2	3.1	3.0	2.7	2.6	2.7	2.7	2.8	2.5	2.6	2.6	2.8	2.8	
EFFLUENT (MG/L)	0.9	1.1*	1.0	0.7	0.6	0.6	0.7	0.8	0.7	0.6	0.6	1.0	0.8	1
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	4.18	4.71	6.67	4.41	4.09	3.27	3.60	3.80	3.71	3.25	3.81	4.60	4.38	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	50%	NO
SS	70%	NO
TP	1.0 MG/L	NO

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES	START DATE	END DATE	ANTICIPATED COMPLIANCE
FACILITY EXPANSION/UPGRADING - ENVIRONMENTAL ASSESSMENT BEING CONDUCTED	1988	1992	1992

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : BANCROFT
PLANT : BANCROFT WPCP
WORKS NUMBER : 110001239
TREATMENT : CONTACT STABILIZATION
:
:
DESIGN CAPACITY : 4.13 (1000 M3)

REGION : SOUTHEAST
DISTRICT : HASTINGS
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : YORK RIVER
MINOR BASIN : OTTAWA RIVER
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 2,095

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.09	1.07	1.24	1.37	1.43	1.37	1.21	1.12	1.07	1.13	1.25	1.17	1.21	
BOD5														
INFLUENT (MG/L)	116.0	ND	ND	58.0	59.0	57.0	49.0	67.0	65.0	99.0	96.0	90.0	75.6	
EFFLUENT (MG/L)	4.5	ND	3.0	13.0	17.5	14.5	2.0	9.0	20.0	8.8	12.5	18.0	11.2	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	4.90	ND	3.72	17.81	25.02	19.86	2.42	10.08	21.40	9.94	15.62	21.06	13.55	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	155.0	128.0	113.0	84.0	60.0	80.0	93.0	102.0	94.0	124.0	125.0	115.0	106.1	
EFFLUENT (MG/L)	7.7	8.5	5.4	6.8	9.3	11.6	9.0	9.0	12.4	5.8	11.2	9.0	8.8	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	8.39	9.09	6.69	9.31	13.29	15.89	10.89	10.08	13.26	6.55	14.00	10.53	10.65	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	5.3	ND	ND	2.0	3.2	4.3	4.2	5.1	6.4	5.5	4.8	4.7	4.6	
EFFLUENT (MG/L)	2.9	ND	1.8	0.7	1.1	2.2	2.1	2.5	3.7	2.5	5.9	2.4	2.5	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	3.16	ND	2.23	0.95	1.57	3.01	2.54	2.80	3.95	2.82	7.37	2.80	3.03	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	NA	NA

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : BARRY'S BAY
PLANT : BARRY'S BAY WPCP
WORKS NUMBER : 110001894
TREATMENT : EXTENDED AERATION
: PHOSPHORUS REMOVAL-CONTINUOUS
:
DESIGN CAPACITY : 1.24 (1000 M3)

REGION : SOUTHEAST
DISTRICT : RENFREW
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : KAMANISKEG LAKE
MINOR BASIN : OTTAWA RIVER
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 1,413

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.37	0.36	0.40	0.44	0.44	0.49	0.51	0.50	0.50	0.43	0.35	0.28	0.42	
BOD5														
INFLUENT (MG/L)	213.0	200.0	148.0	163.0	163.0	112.0	160.0	160.0	133.0	ND	182.0	240.0	170.4	
EFFLUENT (MG/L)	2.5	3.0	3.5	4.0	4.0	2.0	2.5	2.5	4.0	2.5	3.0	3.0	3.0	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	0.92	1.08	1.40	1.76	1.76	0.98	1.27	1.25	2.00	1.07	1.05	0.84	1.26	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	211.0	247.0	204.0	189.0	189.0	151.0	182.0	182.0	259.0	ND	271.0	240.0	211.4	
EFFLUENT (MG/L)	10.1	9.8	9.7	11.4	11.4	8.0	7.7	7.7	8.5	8.6	7.3	6.3	8.9	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	3.73	3.52	3.88	5.01	5.01	3.92	3.92	3.85	4.25	3.69	2.55	1.76	3.74	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.5	7.4	7.2	7.0	7.0	6.8	7.1	7.1	7.4	ND	6.2	5.0	6.8	
EFFLUENT (MG/L)	0.7	0.6	0.7	0.5	0.5	0.6	0.6	0.6	0.7	0.7	0.5	0.4	0.6	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	0.25	0.21	0.28	0.22	0.22	0.29	0.30	0.30	0.35	0.30	0.17	0.11	0.25	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : BATH
PLANT : BATH WPCP
WORKS NUMBER : 120000177
TREATMENT : EXTENDED AERATION
:
:
DESIGN CAPACITY : 1.16 (1000 M3)

REGION : SOUTHEAST
DISTRICT : LENNOX & ADDINGTON
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : LAKE ONTARIO
MINOR BASIN : ONTARIO
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 1,500

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.02	0.98	1.07	0.80	0.85	0.88	0.56	1.16	0.91	0.95	1.15	0.86	0.93	
BOD5														
INFLUENT (MG/L)	187.0	82.0	357.0	142.0	95.0	169.0	168.0	340.0	185.0	175.0	340.0	213.0	204.4	
EFFLUENT (MG/L)	4.0	4.0	5.0	6.0	4.0	1.5	3.0	2.0	2.2	3.0	2.0	59.6	8.0	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	4.08	3.92	5.35	4.80	3.40	1.32	1.68	2.32	2.00	2.85	2.30	51.25	7.44	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	99.0	62.0	218.0	116.0	170.0	118.0	126.0	182.0	101.0	164.0	258.0	166.0	148.3	
EFFLUENT (MG/L)	9.5	7.0	18.5	13.5	7.0	4.0	7.0	2.5	7.3	10.0	14.0	44.6	12.1	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	9.69	6.86	19.79	10.80	5.95	3.52	3.92	2.90	6.64	9.50	16.10	38.35	11.25	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.0	3.7	10.3	6.2	4.7	6.3	4.7	7.8	5.3	5.8	9.7	6.8	6.4	
EFFLUENT (MG/L)	2.1	2.8	3.8	2.4	2.4	4.5	3.5	2.9	3.9	2.5	3.6	4.4	3.2	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	2.14	2.74	4.06	1.92	2.04	3.96	1.96	3.36	3.54	2.37	4.14	3.78	2.98	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	NA	NA

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : BELLEVILLE
PLANT : BELLEVILLE WPCP (163500 M3/D,PRIMARY)
WORKS NUMBER : 1100030116
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL CONTINUOUS
:
DESIGN CAPACITY : 54.55 (1000 M3)

REGION : SOUTHEAST
DISTRICT : HASTINGS
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : BAY OF QUINTE
MINOR BASIN : ONTARIO
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 35,351

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	27.39	23.60	26.96	36.11	30.74	29.24	25.33	22.84	23.58	26.51	44.70	33.94	29.25	
BOD5														
INFLUENT (MG/L)	204.0	284.0	145.0	252.0	161.0	93.0	100.0	91.0	145.0	127.0	112.0	ND	155.8	
EFFLUENT (MG/L)	20.5	16.5	9.0	22.2	13.9	8.8	8.3	12.9	11.0	10.0	25.2	10.5	14.1	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	561.49	389.40	242.64	801.64	427.28	257.31	210.23	294.63	259.38	265.10	1126.44	356.37	412.43	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	126.0	119.0	128.0	123.0	116.0	113.0	116.0	112.0	156.0	118.0	127.0	ND	123.1	
EFFLUENT (MG/L)	9.1	8.4	6.9	13.2	7.1	7.7	10.6	5.5	4.1	8.0	32.5	7.9	10.1	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	249.24	198.24	186.02	476.65	218.25	225.14	268.49	125.62	96.67	212.08	1452.75	268.12	295.43	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	4.9	5.3	5.0	3.7	3.7	3.9	4.3	4.8	5.1	4.1	3.9	ND	4.4	
EFFLUENT (MG/L)	0.2	0.4	0.6	0.6	0.4	0.4	0.3	0.5	0.4	0.4	0.7	0.4	0.4	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	5.47	9.44	16.17	21.66	12.29	11.69	7.59	11.42	9.43	10.60	31.29	13.57	11.70	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NO REMEDIAL MEASURES REPORTED

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : BROCKVILLE
PLANT : BROCKVILLE WPCP
WORKS NUMBER : 120000122
TREATMENT : PRIMARY
: PHOSPHORUS REMOVAL-CONTINUOUS
:
DESIGN CAPACITY : 21.82 (1000 M3)

REGION : SOUTHEAST
DISTRICT : LEEDS AND GRENVILLE
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : ST.LAWRENCE RIVER
MINOR BASIN : ST. LAWRENCE
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 20,607

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	17.91	16.75	19.47	22.04	22.37	18.53	16.56	15.16	15.43	15.07	20.53	15.71	17.96	
BOD5														
INFLUENT (MG/L)	96.0	75.0	74.0	40.0	85.0	63.0	62.0	38.0	99.0	60.0	75.0	150.0	76.4	
EFFLUENT (MG/L)	61.5	52.0	62.5	22.0	24.0	52.0	30.0	18.0	35.5	26.0	25.5	46.0	37.9	
LOADING (KG/D)	1101.46	871.00	1216.87	484.88	536.88	963.56	496.80	272.88	547.76	391.82	523.51	722.66	680.68	
PERCENT REMOVAL	36	31	16	45	72	17	52	53	64	57	66	69	50	
PERCENT REMOVAL LIMITS													50	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	91.0	111.0	94.0	60.0	127.0	86.0	81.0	64.0	123.0	80.0	88.0	148.0	96.1	
EFFLUENT (MG/L)	42.6	38.6	56.0	24.0	33.6	35.8	23.6	23.5	34.8	24.6	32.6	41.8	34.3	
LOADING (KG/D)	762.96	646.55	1090.32	528.96	751.63	663.37	390.81	356.26	536.96	370.72	669.27	656.67	616.03	
PERCENT REMOVAL	53	65	40	60	74	58	71	63	72	69	63	72	64*	
PERCENT REMOVAL LIMITS													70	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	4.7	4.8	4.1	2.9	4.8	5.4	3.8	3.6	4.7	4.3	4.1	6.9	4.5	
EFFLUENT (MG/L)	2.3*	2.0*	1.5*	1.0	1.1*	1.6*	0.9	1.0	1.5*	1.5*	1.2*	2.6*	1.5	9
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	41.19	33.50	29.20	22.04	24.60	29.64	14.90	15.16	23.14	22.60	24.63	40.84	26.94	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	50%	YES
SS	70%	NO
TP	1.0 MG/L	NO

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES	START DATE	END DATE	ANTICIPATED COMPLIANCE
INFLUENT SEWAGE - ENFORCING SEWER USE BYLAW	1989/10		
OPERATIONAL/PROCESS - PHOSPHORUS REMOVAL BEING UPGRADED	1989/10		
FACILITY EXPANSION/UPGRADING - FINAL DESIGN PHASE	1989/10		

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : CARLETON PLACE
PLANT : CARLETON PLACE WPCP
WORKS NUMBER : 110000721
TREATMENT : HIGH RATE
: PHOSPHORUS REMOVAL-CONTINUOUS
:
DESIGN CAPACITY : 5.45 (1000 M3)

REGION : SOUTHEAST
DISTRICT : LANARK
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : MISSISSIPPI RIVER
MINOR BASIN : OTTAWA RIVER
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 6,600

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	3.66	3.66	4.43	4.76	5.11	4.70	4.22	3.75	3.76	3.99	5.73	4.11	4.32	
BOD5														
INFLUENT (MG/L)	49.0	88.0	107.0	56.0	ND	57.0	50.0	ND	79.0	90.0	54.0	75.0	70.5	
EFFLUENT (MG/L)	36.0	45.0	52.0	26.0	ND	12.0	27.4	32.3	32.7	30.5	16.4	35.1	31.4*	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	131.76	164.70	230.36	123.76	ND	56.40	115.62	121.12	122.95	121.69	93.97	144.26	135.65	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	59.0	86.0	191.0	63.0	ND	94.0	88.0	ND	130.0	120.0	70.0	60.0	96.1	
EFFLUENT (MG/L)	56.5	72.5	86.5	51.0	ND	25.0	41.1	45.7	46.2	76.1	47.0	84.8	57.5*	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	206.79	265.35	383.19	242.76	ND	117.50	173.44	171.37	173.71	303.63	269.31	348.52	248.40	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	3.7	4.6	5.5	2.7	ND	4.5	3.7	ND	5.7	5.6	3.8	4.2	4.4	
EFFLUENT (MG/L)	2.5*	2.8*	3.1*	1.6*	ND	0.9	1.4*	1.5*	1.7*	2.6*	1.7*	3.1*	2.1	10
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	9.15	10.24	13.73	7.61	ND	4.23	5.90	5.62	6.39	10.37	9.74	12.74	9.07	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	NO
SS	25.0 MG/L	NO
TP	1.0 MG/L	NO

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES

	START DATE	END DATE	ANTICIPATED COMPLIANCE
COLLECTION SYSTEM - COLLECTION SYSTEM UNDER REVIEW			1992
FACILITY EXPANSION/UPGRADING - ENGINEERING STUDY PHASE			1992

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : CASSELMAN
PLANT : CASSELMAN LAGOON
WORKS NUMBER : 110002201
TREATMENT : CONVENTIONAL LAGOON SEASONAL
:
:
DESIGN CAPACITY : 1.36 (1000 M3)

REGION : SOUTHEAST
DISTRICT : PRESCOTT AND RUSSELL
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : S. NATION RIVER
MINOR BASIN : OTTAWA RIVER
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 2,021

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.69	0.69	0.84	0.87	0.83	0.83	0.70	0.74	0.69	0.73	1.04	0.76	0.78	
LAGOON DISCHARGE	ND	ND	ND	ND	120.00	ND	ND	ND	ND	ND	115.20	ND	117.60	
BOD5														
INFLUENT (MG/L)	105.0	218.0	180.0	86.0	62.0	50.0	125.0	175.0	56.0	220.0	146.0	238.0	138.4	
EFFLUENT (MG/L)	ND	ND	ND	ND	3.0	ND	ND	ND	ND	ND	5.7	ND	4.4	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	ND	2.49	ND	ND	ND	ND	ND	5.92	ND	3.43	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	67.0	356.0	120.0	63.0	72.0	46.0	93.0	200.0	32.0	118.0	189.0	189.0	128.8	
EFFLUENT (MG/L)	ND	ND	ND	ND	6.8	ND	ND	ND	ND	ND	11.3	ND	9.1	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	ND	5.64	ND	ND	ND	ND	ND	11.75	ND	7.10	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.3	14.2	6.7	4.7	4.4	4.3	6.3	8.1	5.1	13.6	7.1	8.9	7.5	
EFFLUENT (MG/L)	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	0.3	ND	0.8	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	1.07	ND	ND	ND	ND	ND	0.31	ND	0.62	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	NA	NA

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES	START DATE	END DATE	ANTICIPATED COMPLIANCE
NO ACTION - MARGINAL FAILURE-MONITORING LEVEL OF FAILED PARAMETER CLOSELY			1990

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : CHALK RIVER
PLANT : CHALK RIVER WPCP
WORKS NUMBER : 110001587
TREATMENT : EXTENDED AERATION
: CONVERTIBLE OPERATING MODE
:
DESIGN CAPACITY : 0.54 (1000 M3)

REGION : SOUTHEAST
DISTRICT : RENFREW
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : DUCK CR TO DUCK LAKE
MINOR BASIN : OTTAWA RIVER
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 986

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.38	0.36	0.39	0.40	0.47	0.44	0.43	0.43	0.40	0.37	0.36	0.38	0.40	
BOD5														
INFLUENT (MG/L)	76.0	139.0	107.0	131.0	124.0	61.0	165.0	96.0	139.0	105.0	114.0	61.0	109.8	
EFFLUENT (MG/L)	11.5	22.6	21.7	11.4	11.8	11.5	16.0	9.3	7.9	5.8	5.5	4.0	11.6	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	4.37	8.13	8.46	4.56	5.54	5.06	6.88	3.99	3.16	2.14	1.98	1.52	4.64	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	139.0	149.0	130.0	137.0	115.0	173.0	172.0	123.0	136.0	122.0	136.0	146.0	139.8	
EFFLUENT (MG/L)	23.7	27.0	23.3	14.4	16.2	16.9	21.3	19.2	14.9	17.0	13.4	12.7	18.3	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	9.00	9.72	9.08	5.76	7.61	7.43	9.15	8.25	5.96	6.29	4.82	4.82	7.32	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	3.1	6.4	4.3	4.3	4.7	2.9	5.8	6.6	6.4	4.7	6.8	2.5	4.9	
EFFLUENT (MG/L)	2.7	4.3	2.9	1.6	1.6	1.7	1.6	1.8	2.4	2.5	2.1	2.0	2.3	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	1.02	1.54	1.13	0.64	0.75	0.74	0.68	0.77	0.96	0.92	0.75	0.76	0.92	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	NA	NA

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : CHARLOTTENBURGH
PLANT : PURCELL WPCP OP. NOV 89
WORKS NUMBER : 110002684
TREATMENT : EXTENDED AERATION
: CONTACT STABILIZATION
:
DESIGN CAPACITY : 0.52 (1000 M3)

REGION : SOUTHEAST
DISTRICT : STORMONT, DUNDAS AND GLENGARRY
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : ST LAWRENCE
MINOR BASIN : ST. LAWRENCE
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 582

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.13	0.14	0.14	
BOD5														
INFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	25.0	203.0	114.0	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.4	2.8	2.6	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.31	0.39	0.36	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	153.0	323.0	238.0	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	15.4	22.0	18.7	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.00	3.08	2.62	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.4	4.7	3.6	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8	1.6	1.2	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.10	0.22	0.17	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	INSUFFICIENT DATA
SS	25.0 MG/L	INSUFFICIENT DATA
TP	NA	INSUFFICIENT DATA

NO REMEDIAL MEASURES REPORTED

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : CHESTERVILLE
PLANT : CHESTERVILLE LAGOON
WORKS NUMBER : 110000114
TREATMENT : CONVENTIONAL LAGOON SEASONAL
:
:
DESIGN CAPACITY : 1.04 (1000 M3)

REGION : SOUTHEAST
DISTRICT : STORMONT, DUNDAS AND GLENGARRY
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : SOUTH NATION RIVER
MINOR BASIN : OTTAWA RIVER
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 1,460

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.54	0.51	0.71	0.91	0.96	0.81	0.61	0.57	0.51	0.61	1.13	0.60	0.71	
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	97.56	ND	97.56	
BOD5														
INFLUENT (MG/L)	62.0	50.0	55.0	17.0	38.0	23.0	51.0	42.0	68.0	56.0	42.0	110.0	51.2	
EFFLUENT (MG/L)	ND	ND	ND	ND	7.5	ND	ND	ND	ND	ND	8.0	ND	7.8	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	ND	7.20	ND	ND	ND	ND	ND	9.04	ND	5.54	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	56.0	47.0	71.0	40.0	70.0	32.0	94.0	81.0	54.0	45.0	43.0	84.0	59.8	
EFFLUENT (MG/L)	ND	ND	ND	ND	13.0	ND	ND	ND	ND	ND	39.5	ND	26.3	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	ND	12.48	ND	ND	ND	ND	ND	44.63	ND	18.67	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	5.1	4.4	5.6	1.9	3.1	2.6	4.4	4.3	4.9	4.5	2.7	5.1	4.1	
EFFLUENT (MG/L)	ND	ND	ND	ND	2.8	ND	ND	ND	ND	ND	0.9	ND	1.9	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	2.68	ND	ND	ND	ND	ND	1.01	ND	1.35	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	NA	NA

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES

	START DATE	END DATE	ANTICIPATED COMPLIANCE
OPERATIONAL/PROCESS - SAMPLING PROGRAM BEING MODIFIED			

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : COBDEN
PLANT : COBDEN WPCP
WORKS NUMBER : 120000596
TREATMENT : EXTENDED AERATION
: PHOSPHORUS REMOVAL-CONTINUOUS
:
DESIGN CAPACITY : 0.68 (1000 M3)

REGION : SOUTHEAST
DISTRICT : RENFREW
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : MUSKRAT RIVER
MINOR BASIN : OTTAWA RIVER
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 1,035

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.54	0.47	0.76	0.86	0.95	0.72	0.54	0.51	0.65	0.71	0.88	0.58	0.68	
BOD5														
INFLUENT (MG/L)	46.0	88.0	86.0	38.0	24.0	48.0	82.0	54.0	52.0	14.0	20.0	50.0	50.2	
EFFLUENT (MG/L)	7.0	2.0	6.0	2.0	6.0	6.0	2.0	2.0	2.0	2.0	2.0	2.0	3.4	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	3.78	0.94	4.56	1.72	5.70	4.32	1.08	1.02	1.30	1.42	1.76	1.16	2.31	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	91.0	73.0	126.0	34.0	73.0	77.0	111.0	79.0	79.0	64.0	68.0	85.0	80.0	
EFFLUENT (MG/L)	7.3	4.8	16.0	6.2	4.4	5.3	4.9	5.5	7.2	7.0	5.4	7.8	6.8	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	3.94	2.25	12.16	5.33	4.18	3.81	2.64	2.80	4.68	4.97	4.75	4.52	4.62	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	4.7	4.6	4.5	3.7	3.4	3.4	4.1	4.9	4.0	3.4	3.0	3.7	4.0	
EFFLUENT (MG/L)	0.5	0.9	0.8	0.7	0.7	0.7	0.8	0.6	0.7	0.6	0.7	0.8	0.7	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	0.27	0.42	0.60	0.60	0.66	0.50	0.43	0.30	0.45	0.42	0.61	0.46	0.48	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 CERTIFICATE OF APPROVAL ASSESSMENT

MUNICIPALITY : CORNWALL
PLANT : CORNWALL WPCP
WORKS NUMBER : 1110000132
TREATMENT : PRIMARY
: PHOSPHORUS REMOVAL CONTINUOUS
:
DESIGN CAPACITY : 54.55 (1000 M3)

REGION : SOUTHEAST
DISTRICT : STORMONT, DUNDAS AND GLENGARRY
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : ST. LAWRENCE RIVER
MINOR BASIN : ST. LAWRENCE
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 46,800

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	39.98	37.27	52.48	59.36	54.29	58.54	53.76	55.00	47.00	47.00	55.77	32.73	49.43	
BOD5														
INFLUENT (MG/L)	70.0	68.0	98.0	58.0	91.0	54.0	39.0	32.0	56.0	78.0	61.0	68.0	64.4	
EFFLUENT (MG/L)	40.0	32.0	52.4	24.0	38.0	24.0	18.0	9.0	27.0	36.0	20.5	24.0	28.7	
CONCENTRATION LIMIT (MG/L)													90.0	
LOADING (KG/D)	1599.20	1192.64	2749.95	1424.64	2063.02	1404.96	967.68	495.00	1269.00	1692.00	1143.28	785.52	1418.64	
LOADING LIMIT (KG/D)														
SUSPENDED SOLIDS														
INFLUENT (MG/L)	113.0	130.0	105.0	110.0	130.0	97.0	99.0	106.0	116.0	143.0	108.0	92.0	112.4	
EFFLUENT (MG/L)	21.0	19.0	23.0	18.0	19.0	16.0	16.0	13.0	16.0	15.0	15.4	18.0	17.5	
CONCENTRATION LIMIT (MG/L)													60.0	
LOADING (KG/D)	839.58	708.13	1207.04	1068.48	1031.51	936.64	860.16	715.00	752.00	705.00	858.85	589.14	865.03	
LOADING LIMIT (KG/D)														
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	2.7	2.8	2.8	2.5	3.5	3.0	2.9	3.1	3.7	3.5	2.9	3.3	3.1	
EFFLUENT (MG/L)	0.9	0.9	0.9	0.9	ND	0.7	0.8	0.8	0.9	0.8	0.7	1.0	0.8	
CONCENTRATION LIMIT (MG/L)													1.0	
LOADING (KG/D)	35.98	33.54	47.23	53.42	ND	40.97	43.00	44.00	42.30	37.60	39.03	32.73	39.54	
LOADING LIMIT (KG/D)														

SUMMARY

PARM	CRITERIA	LOADING	COMPLIES WITH CONC	COMPLIES WITH LOADING
BOD	90.0 MG/L	NA	YES	NA
SS	60.0 MG/L	NA	YES	NA
TP	1.0 MG/L	NA	YES	NA

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED ANNUALLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : CORNWALL
PLANT : CORNWALL WPCP
WORKS NUMBER : 110000132
TREATMENT : PRIMARY
: PHOSPHORUS REMOVAL-CONTINUOUS
:
DESIGN CAPACITY : 54.55 (1000 M3)

REGION : SOUTHEAST
DISTRICT : STORMONT, DUNDAS AND GLENGARRY
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : ST. LAWRENCE RIVER
MINOR BASIN : ST. LAWRENCE
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 46,800

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	39.98	37.27	52.48	59.36	54.29	58.54	53.76	55.00	47.00	47.00	55.77	32.73	49.43	
BOD5														
INFLUENT (MG/L)	70.0	68.0	98.0	58.0	91.0	54.0	39.0	32.0	56.0	78.0	61.0	68.0	64.4	
EFFLUENT (MG/L)	40.0	32.0	52.4	24.0	38.0	24.0	18.0	9.0	27.0	36.0	20.5	24.0	28.7	
LOADING (KG/D)	1599.20	1192.64	2749.95	1424.64	2063.02	1404.96	967.68	495.00	1269.00	1692.00	1143.28	785.52	1418.64	
PERCENT REMOVAL	43	53	47	59	58	56	54	72	52	54	66	65	55	
PERCENT REMOVAL LIMITS													50	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	113.0	130.0	105.0	110.0	130.0	97.0	99.0	106.0	116.0	143.0	108.0	92.0	112.4	
EFFLUENT (MG/L)	21.0	19.0	23.0	18.0	19.0	16.0	16.0	13.0	16.0	15.0	15.4	18.0	17.5	
LOADING (KG/D)	839.58	708.13	1207.04	1068.48	1031.51	936.64	860.16	715.00	752.00	705.00	858.85	589.14	865.03	
PERCENT REMOVAL	81	85	78	84	85	84	84	88	86	90	86	80	84	
PERCENT REMOVAL LIMITS													70	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	2.7	2.8	2.8	2.5	3.5	3.0	2.9	3.1	3.7	3.5	2.9	3.3	3.1	
EFFLUENT (MG/L)	0.9	0.9	0.9	0.9	ND	0.7	0.8	0.8	0.9	0.8	0.7	1.0	0.8	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	35.98	33.54	47.23	53.42	ND	40.97	43.00	44.00	42.30	37.60	39.03	32.73	39.54	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	50%	YES
SS	70%	YES
TP	1.0 MG/L	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : CORNWALL
PLANT : LONG SAULT WPCP
WORKS NUMBER : 1200000131
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
:
:
DESIGN CAPACITY : 1.36 (1000 M3)

REGION : SOUTHEAST
DISTRICT : STORMONT, DUNDAS AND GLENGARRY
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : ST.LAWRENCE RIVER
MINOR BASIN : ST. LAWRENCE
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 1,300

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.75	0.75	0.90	1.25	1.51	1.43	1.12	1.45	1.04	1.69	2.26	1.37	1.29	
BOD5														
INFLUENT (MG/L)	ND	16.0	102.0	ND	16.0	ND	18.0	14.0	20.0	40.0	49.0	150.0	47.2	
EFFLUENT (MG/L)	ND	14.0	2.0	ND	16.0	2.0	2.0	4.0	4.0	4.0	15.0	4.0	6.7	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	10.50	1.80	ND	24.16	2.86	2.24	5.80	4.16	6.76	33.90	5.48	8.64	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	ND	13.0	149.0	ND	26.0	ND	19.0	12.0	27.0	27.0	27.0	136.0	48.4	
EFFLUENT (MG/L)	ND	14.0	11.0	ND	21.0	6.0	4.0	3.0	6.0	11.6	38.0	6.0	12.1	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	10.50	9.90	ND	31.71	8.58	4.48	4.35	6.24	19.60	85.88	8.22	15.61	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	ND	1.3	6.4	ND	2.1	ND	3.4	2.7	3.3	2.0	1.6	6.2	3.2	
EFFLUENT (MG/L)	ND	3.5	4.1	ND	2.9	2.5	3.7	3.7	4.7	2.7	1.5	2.8	3.2	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	2.62	3.69	ND	4.37	3.57	4.14	5.36	4.88	4.56	3.39	3.83	4.13	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	NA	NA

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES

	START DATE	END DATE	ANTICIPATED COMPLIANCE
INFLUENT SEWAGE - INSTALLING INDUSTRIAL PRETREATMENT			

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : DEEP RIVER
PLANT : DEEP RIVER WPCP
WORKS NUMBER : 120000612
TREATMENT : PRIMARY
:
:
DESIGN CAPACITY : 2.18 (1000 M3)

REGION : SOUTHEAST
DISTRICT : RENFREW
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : OTTAWA RIVER
MINOR BASIN : OTTAWA RIVER
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 4,230

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	2.31	1.68	1.92	2.09	1.64	1.71	1.71	1.62	1.46	1.53	1.65	1.42	1.73	
BOD5														
INFLUENT (MG/L)	155.0	110.0	84.0	230.0	110.0	80.0	64.0	130.0	86.0	80.0	98.0	135.0	113.5	
EFFLUENT (MG/L)	60.0	96.0	66.0	96.0	44.0	36.0	49.0	52.0	60.0	56.0	50.0	48.0	59.4	
LOADING (KG/D)	138.60	161.28	126.72	200.64	72.16	61.56	83.79	84.24	87.60	85.68	82.50	68.16	102.76	
PERCENT REMOVAL	61	13	21	58	60	55	23	60	30	30	49	64	48	
PERCENT REMOVAL LIMITS													30	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	115.0	128.0	98.0	160.0	124.0	80.0	114.0	150.0	76.0	67.0	103.0	100.0	109.6	
EFFLUENT (MG/L)	48.0	94.0	65.0	154.0	50.0	37.0	73.0	66.0	34.0	69.6	42.0	28.0	63.4	
LOADING (KG/D)	110.88	157.92	124.80	321.86	82.00	63.27	124.83	106.92	49.64	106.48	69.30	39.76	109.68	
PERCENT REMOVAL	58	27	34	04	60	54	36	56	55	ND	59	72	42*	
PERCENT REMOVAL LIMITS													50	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	60.9	10.0	5.3	6.9	9.3	7.0	8.7	8.6	5.5	5.0	5.6	10.8	12.0	
EFFLUENT (MG/L)	5.0	0.9	5.8	5.1	4.5	3.8	4.1	5.4	4.9	5.0	5.0	3.9	4.5	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	11.55	1.51	11.13	10.65	7.38	6.49	7.01	8.74	7.15	7.65	8.25	5.53	7.79	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	30%	YES
SS	50%	NO
TP	NA	NA

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES

START DATE	END DATE	ANTICIPATED COMPLIANCE

NO ACTION - MARGINAL FAILURE-MONITORING LEVEL OF FAILED PARAMETER CLOSELY

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : DELORO
PLANT : DELORO WPCP
WORKS NUMBER : 120000970
TREATMENT : COMMUNAL SEPTIC TANK
:
:
DESIGN CAPACITY : 1.74 (1000 M3)

REGION : SOUTHEAST
DISTRICT : HASTINGS
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : MOIRA RIVER
MINOR BASIN : ONTARIO
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 157

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BOD5														
INFLUENT (MG/L)	101.0	91.0	94.0	45.0	29.0	34.0	110.0	144.0	120.0	232.0	41.0	36.0	89.8	
EFFLUENT (MG/L)	1.8	3.0	2.0	2.0	1.4	2.7	1.8	2.0	1.7	1.5	1.4	1.7	1.9	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
PERCENT REMOVAL	98	97	98	96	95	92	98	99	99	99	97	95	98	
PERCENT REMOVAL LIMITS													30	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	169.0	115.0	215.0	78.0	53.0	36.0	176.0	118.0	120.0	171.0	50.0	67.0	114.0	
EFFLUENT (MG/L)	2.8	3.5	3.8	2.8	3.0	3.0	3.8	4.4	5.1	3.0	3.2	4.0	3.5	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
PERCENT REMOVAL	98	97	98	96	94	92	98	96	96	98	94	94	97	
PERCENT REMOVAL LIMITS													50	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	4.1	3.5	4.4	2.1	1.2	2.1	4.0	5.2	4.9	5.4	2.2	1.5	3.4	
EFFLUENT (MG/L)	1.9	1.8	1.8	1.2	1.2	1.2	1.4	1.6	1.7	1.7	1.3	1.3	1.5	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	30%	YES
SS	50%	YES
TP	NA	NA

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : DESERONTO
PLANT : DESERONTO WPCP
WORKS NUMBER : 110000980
TREATMENT : EXTENDED AERATION
: PHOSPHORUS REMOVAL-CONTINUOUS
:
DESIGN CAPACITY : 1.36 (1000 M3)

REGION : SOUTHEAST
DISTRICT : HASTINGS
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : BAY OF QUINTE
MINOR BASIN : ONTARIO
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 1,732

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.15	1.04	1.37	1.56	1.46	1.30	1.41	1.05	1.20	1.30	1.78	1.33	1.33	
BOD5														
INFLUENT (MG/L)	79.0	100.0	65.0	77.0	74.0	62.0	95.0	ND	71.0	ND	51.0	118.0	79.2	
EFFLUENT (MG/L)	5.8	3.5	7.5	2.5	6.8	1.8	3.3	2.2	2.6	3.3	4.0	9.0	4.4	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	6.67	3.64	10.27	3.90	9.92	2.34	4.65	2.31	3.12	4.29	7.12	11.97	5.85	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	79.0	105.0	106.0	102.0	101.0	124.0	142.0	ND	122.0	ND	77.0	115.0	107.3	
EFFLUENT (MG/L)	15.0	11.0	13.5	5.3	14.6	7.1	8.2	3.6	7.6	11.5	19.6	17.3	11.2	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	17.25	11.44	18.49	8.26	21.31	9.23	11.56	3.78	9.12	14.95	34.88	23.00	14.90	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	4.4	4.8	3.6	4.1	3.7	4.0	5.9	ND	4.4	ND	4.0	5.7	4.5	
EFFLUENT (MG/L)	0.7	0.5	0.7	0.4	0.6	0.3	0.4	0.5	0.5	0.4	0.8	0.6	0.5	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	0.80	0.52	0.95	0.62	0.87	0.39	0.56	0.52	0.60	0.52	1.42	0.79	0.67	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : EAST HAWKESBURY
PLANT : CHUTE A BLONDEAU WPCP IN OP. 1987
WORKS NUMBER : 110003599
TREATMENT : EXTENDED AERATION

DESIGN CAPACITY : 0.10 (1000 M3)

REGION : SOUTHEAST
DISTRICT : PRESCOTT AND RUSSELL
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : OTTAWA RIVER
MINOR BASIN : OTTAWA RIVER
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 165

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.03	0.03	0.06	0.07	0.08	0.11	0.06	0.04	0.03	0.04	0.07	0.05	0.06	
BOD5														
INFLUENT (MG/L)	ND	660.0	265.0	150.0	88.0	92.0	101.0	88.0	129.0	174.0	131.0	104.0	180.2	
EFFLUENT (MG/L)	ND	2.0	5.0	2.0	4.2	11.8	5.0	4.0	3.3	3.8	2.3	4.9	4.4	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	0.06	0.30	0.14	0.33	1.29	0.30	0.16	0.09	0.15	0.16	0.24	0.26	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	214.0	244.0	186.0	112.0	211.0	143.0	109.0	97.0	155.0	162.0	83.0	67.0	148.6	
EFFLUENT (MG/L)	21.0	25.8	21.0	13.9	12.6	18.5	12.3	10.0	11.6	13.0	13.1	5.2	14.8	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	0.63	0.77	1.26	0.97	1.00	2.03	0.73	0.40	0.34	0.52	0.91	0.26	0.89	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	8.2	18.9	11.1	9.6	9.3	6.5	15.7	7.4	5.1	8.0	3.1	7.3	9.2	
EFFLUENT (MG/L)	6.8	8.6	9.2	2.2	2.0	5.0	4.7	4.4	5.1	5.7	3.4	3.3	5.0	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	0.20	0.25	0.55	0.15	0.16	0.55	0.28	0.17	0.15	0.22	0.23	0.16	0.30	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	NA	NA

NO REMEDIAL MEASURES REPORTED

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : EGANVILLE
PLANT : EGANVILLE WPCP
WORKS NUMBER : 110000141
TREATMENT : EXTENDED AERATION
:
:
DESIGN CAPACITY : 0.76 (1000 M3)

REGION : SOUTHEAST
DISTRICT : RENFREW
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : BONNECHERE RIVER
MINOR BASIN : OTTAWA RIVER
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 1,219

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.48	0.47	0.54	0.55	0.67	0.61	0.54	0.46	0.48	0.50	0.52	0.48	0.53	
BOD5														
INFLUENT (MG/L)	183.0	144.0	145.0	141.0	100.0	107.0	117.0	80.0	116.0	156.0	171.0	220.0	140.0	
EFFLUENT (MG/L)	5.0	5.5	4.3	5.0	3.0	2.5	2.0	3.0	3.5	2.8	3.5	3.3	3.6	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	2.40	2.58	2.32	2.75	2.01	1.52	1.08	1.38	1.68	1.40	1.82	1.58	1.91	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	163.0	114.0	137.0	147.0	115.0	137.0	107.0	80.0	96.0	137.0	176.0	98.0	125.6	
EFFLUENT (MG/L)	8.0	9.7	16.0	11.0	12.6	16.7	8.0	11.2	10.9	7.3	16.0	14.0	11.8	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	3.84	4.55	8.64	6.05	8.44	10.18	4.32	5.15	5.23	3.65	8.32	6.72	6.25	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	5.2	6.1	5.6	5.4	4.8	5.8	4.8	4.7	5.1	4.4	3.6	4.0	5.0	
EFFLUENT (MG/L)	0.7	0.5	0.9	0.5	0.6	0.6	0.6	0.6	0.6	0.5	0.4	0.4	0.6	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	0.33	0.23	0.48	0.27	0.40	0.36	0.32	0.27	0.28	0.25	0.20	0.19	0.32	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	NA	NA

NO REMEDIAL MEASURES REPORTED

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : ERNESTOWN
PLANT : AMHERSTVILLE LAGOON
WORKS NUMBER : 110000196
TREATMENT : CONVENTIONAL LAGOON CONTINUOUS
:
:
DESIGN CAPACITY : 2.39 (1000 M3)

REGION : SOUTHEAST
DISTRICT : LENNOX & ADDINGTON
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : COLLINS CR. N.CHANNEL
MINOR BASIN : ONTARIO
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 6,900

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	2.16	2.06	2.65	2.86	2.50	2.38	1.76	1.90	1.97	2.30	3.37	2.45	2.36	
LAGOON DISCHARGE	66.95	57.71	82.13	85.81	77.45	71.42	54.57	58.97	59.18	71.33	101.13	76.08	71.89	
BOD5														
INFLUENT (MG/L)	134.0	89.0	145.0	84.0	85.0	73.0	93.0	98.0	88.0	99.0	61.0	113.0	96.8	
EFFLUENT (MG/L)	25.5	31.8	23.7	29.8	33.3	41.0	33.5	35.2	30.2	26.0	29.5	26.0	30.5*	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	55.08	65.50	62.80	85.22	83.25	97.58	58.96	66.88	59.49	59.80	99.41	63.70	71.98	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	168.0	81.0	287.0	65.0	87.0	71.0	90.0	82.0	63.0	101.0	62.0	74.0	102.6	
EFFLUENT (MG/L)	52.3	49.8	37.3	59.5	55.4	70.8	83.2	118.2	81.0	65.8	53.8	48.3	64.6*	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	112.96	102.58	98.84	170.17	138.50	168.50	146.43	224.58	159.57	151.34	181.30	118.33	152.46	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	5.8	4.9	4.7	4.1	4.9	4.7	6.2	8.2	5.5	5.2	4.0	6.3	5.4	
EFFLUENT (MG/L)	6.3	6.6	6.1	4.9	0.1	4.6	3.0	3.0	2.9	3.8	3.6	4.2	4.1	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	13.60	13.59	16.16	14.01	0.25	10.94	5.28	5.70	5.71	8.74	12.13	10.29	9.68	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	NO
SS	40.0 MG/L	NO
TP	NA	NA

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES	START DATE	END DATE	ANTICIPATED COMPLIANCE
COLLECTION SYSTEM - PUMPING STATION MODIFICATION	1990/03		

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : ERNESTOWN
PLANT : ODESSA WPCP
WORKS NUMBER : 110002041
TREATMENT : EXTENDED AERATION
: PHOSPHORUS REMOVAL-CONTINUOUS
:
DESIGN CAPACITY : 0.90 (1000 M3)

REGION : SOUTHEAST
DISTRICT : LENNOX & ADDINGTON
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : MILLHAVEN CREEK
MINOR BASIN : ONTARIO
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 973

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.05	0.94	1.68	1.88	1.42	1.26	0.92	0.85	0.88	0.95	2.33	0.86	1.25	
BOD5														
INFLUENT (MG/L)	45.0	50.0	64.0	24.0	33.0	23.0	35.0	40.0	41.0	46.0	18.0	51.0	39.2	
EFFLUENT (MG/L)	4.2	11.5	11.3	6.8	4.0	2.3	2.0	2.0	1.8	2.0	2.2	4.7	4.6	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	4.41	10.81	18.98	12.78	5.68	2.89	1.84	1.70	1.58	1.90	5.12	4.04	5.75	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	46.0	48.0	86.0	41.0	44.0	35.0	54.0	50.0	38.0	72.0	41.0	52.0	50.6	
EFFLUENT (MG/L)	31.4	43.8	40.8	47.0	26.4	11.0	7.3	7.4	11.0	12.6	17.4	22.0	23.2	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	32.97	41.17	68.54	88.36	37.48	13.86	6.71	6.29	9.68	11.97	40.54	18.92	29.00	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	3.5	2.9	4.2	1.7	2.0	2.3	2.8	3.0	3.2	2.8	1.5	3.0	2.7	
EFFLUENT (MG/L)	1.3*	1.5*	1.6*	1.6*	0.9	0.4	0.4	0.4	0.6	0.4	0.7	0.6	0.9	4
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	1.36	1.41	2.68	3.00	1.27	0.50	0.36	0.34	0.52	0.38	1.63	0.51	1.13	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	NO

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES

	START DATE	END DATE	ANTICIPATED COMPLIANCE
COLLECTION SYSTEM - COLLECTION SYSTEM UNDER REVIEW			1990

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : FRANKFORD
PLANT : FRANKFORD WPCP
WORKS NUMBER : 110000267
TREATMENT : CONTACT STABILIZATION
: PHOSPHORUS REMOVAL-CONTINUOUS
:
DESIGN CAPACITY : 1.36 (1000 M3)

REGION : SOUTHEAST
DISTRICT : HASTINGS
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : TRENT RIVER
MINOR BASIN : ONTARIO
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 2,190

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.07	0.93	0.97	1.35	1.28	0.89	0.62	0.64	7.94	0.85	1.45	1.05	1.59	
BOD5														
INFLUENT (MG/L)	255.0	153.0	137.0	70.0	145.0	168.0	200.0	255.0	86.0	191.0	207.0	146.0	167.8	
EFFLUENT (MG/L)	15.8	14.3	8.5	12.3	16.4	13.0	11.0	19.9	8.3	8.2	10.0	11.0	12.4	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	16.90	13.29	8.24	16.60	20.99	11.57	6.82	12.73	65.90	6.97	14.50	11.55	19.72	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	81.0	112.0	135.0	63.0	113.0	120.0	121.0	153.0	126.0	185.0	98.0	104.0	117.6	
EFFLUENT (MG/L)	16.9	16.7	22.8	19.5	25.1	17.9	15.0	16.9	6.2	7.1	10.6	17.3	16.0	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	18.08	15.53	22.11	26.32	32.12	15.93	9.30	10.81	49.22	6.03	15.37	18.16	25.44	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	7.0	5.9	6.3	4.5	5.5	5.4	5.0	4.8	5.4	4.7	4.6	4.9	5.3	
EFFLUENT (MG/L)	0.6	0.4	0.3	0.5	0.4	0.6	0.7	0.6	0.3	0.4	0.5	0.6	0.5	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	0.64	0.37	0.29	0.67	0.51	0.53	0.43	0.38	2.38	0.34	0.72	0.63	0.80	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : GANANOQUE
PLANT : GANANOQUE LAGOON
WORKS NUMBER : 110000285
TREATMENT : CONVENTIONAL LAGOON SEASONAL
:
:
DESIGN CAPACITY : 3.27 (1000 M3)

REGION : SOUTHEAST
DISTRICT : LEEDS AND GRENVILLE
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : STOCKING CR GANANOQUE R
MINOR BASIN : ST. LAWRENCE
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 4,800

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	5.21	4.80	5.39	5.44	5.22	4.71	3.82	4.25	3.80	3.95	5.27	3.51	4.61	
LAGOON DISCHARGE	161.40	135.10	167.10	319.31	290.78	ND	ND	46.71	114.03	122.36	158.22	108.78	162.38	
BOD5														
INFLUENT (MG/L)	64.0	49.0	100.0	40.0	52.0	52.0	73.0	98.0	87.0	114.0	53.0	57.0	69.9	
EFFLUENT (MG/L)	8.5	9.5	17.0	19.3	17.8	ND	ND	7.0	3.5	4.5	3.5	2.5	9.3	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	44.28	45.60	91.63	104.99	92.91	ND	ND	29.75	13.30	17.77	18.44	8.77	42.87	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	92.0	126.0	233.0	69.0	97.0	88.0	82.0	111.0	133.0	259.0	83.0	113.0	123.8	
EFFLUENT (MG/L)	31.5	24.5	36.0	22.7	40.1	ND	ND	11.0	3.1	6.3	8.8	4.5	18.9	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	164.11	117.60	194.04	123.48	209.32	ND	ND	46.75	11.78	24.88	46.37	15.79	87.13	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	3.5	4.2	4.7	2.5	2.4	3.7	4.3	5.5	3.8	6.2	3.5	3.8	4.0	
EFFLUENT (MG/L)	2.3	2.6	2.7	2.0	2.5	ND	ND	2.0	2.7	3.5	3.1	2.5	2.6	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	11.98	12.48	14.55	10.88	13.05	ND	ND	8.50	10.26	13.82	16.33	8.77	11.99	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	NA	NA

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES

	START DATE	END DATE	ANTICIPATED COMPLIANCE
COLLECTION SYSTEM - INFILTRATION PROBLEMS BEING CORRECTED	1988	1991	1991
COLLECTION SYSTEM - ILLEGAL CONNECTIONS BEING ELIMINATED	1988	1991	1991
FACILITY EXPANSION/UPGRADING - REMEDIAL MEASURES BEING EVALUATED	1989	1995	1995
FACILITY EXPANSION/UPGRADING - FINAL DESIGN PHASE	1989	1995	1995

1989 CERTIFICATE OF APPROVAL ASSESSMENT

MUNICIPALITY : GLOUCESTER
PLANT : GREEN CREEK WPCP
WORKS NUMBER : 120000729
TREATMENT : PRIMARY
: PHOSPHORUS REMOVAL-CONTINUOUS
:
DESIGN CAPACITY : 363.68 (1000 M3)

REGION : SOUTHEAST
DISTRICT : OTTAWA-CARLETON, REG. MUN.
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : OTTAWA RIVER
MINOR BASIN : OTTAWA RIVER
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 450,000

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	422.90	410.90	489.60	514.10	520.80	485.10	450.90	448.20	434.50	427.30	471.50	450.00	460.48	
BODS														
INFLUENT (MG/L)	116.0	121.0	98.0	100.0	90.0	116.4	96.0	76.0	109.0	122.0	98.0	120.0	105.2	
EFFLUENT (MG/L)	59.1	54.6	53.2	43.3	34.2	30.3	24.8	29.5	33.9	38.1	29.9	53.3	40.4*	
CONCENTRATION LIMIT (MG/L)													39.0	
LOADING (KG/D)	4993.39	2435.14	6046.77	2260.53	7811.36	4698.53	1182.32	3221.90	4729.55	6280.13	4097.85	3985.00	18603.39*	
LOADING LIMIT (KG/D)													217.20	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	144.0	148.0	141.0	151.0	127.0	142.2	148.0	108.0	137.0	140.0	150.0	167.0	141.9	
EFFLUENT (MG/L)	49.5	55.4	61.0	51.4	50.8	41.6	42.9	37.5	52.6	39.4	47.7	60.7	49.2*	
CONCENTRATION LIMIT (MG/L)													31.0	
LOADING (KG/D)	933.55	2763.86	9865.60	6424.74	6456.64	180.16	9343.61	6807.50	2854.70	6835.62	2490.55	7315.00	22655.62*	
LOADING LIMIT (KG/D)													169.00	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	4.1	3.9	3.6	3.3	3.3	3.7	4.0	3.5	4.9	4.5	3.8	4.1	3.9	
EFFLUENT (MG/L)	2.7*	2.2*	2.2*	2.0*	1.7*	1.4*	1.4*	1.4*	2.1*	1.8*	1.5*	2.4*	1.9	12
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	1141.83	903.98	1077.12	1028.20	885.36	679.14	631.26	627.48	912.45	769.14	707.25	1080.00	874.91*	
LOADING LIMIT (KG/D)													5.45	

SUMMARY

PARM	CRITERIA	LOADING	COMPLIES WITH CONC	COMPLIES WITH LOADING
BOD	39.0 MG/L	212.70 KG/D	NO	NO
SS	31.0 MG/L	169.00 KG/D	NO	NO
TP	1.0 MG/L	5.45 KG/D	NO	NO

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED ANNUALLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES	START DATE	END DATE	ANTICIPATED COMPLIANCE
FACILITY EXPANSION/UPGRADING - CONSTRUCTION INITIATED	1988	1990/03	1991

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : GLOUCESTER
PLANT : GREEN CREEK WPCP
WORKS NUMBER : 120000729
TREATMENT : PRIMARY
: PHOSPHORUS REMOVAL-CONTINUOUS
:
DESIGN CAPACITY : 363.68 (1000 M3)

REGION : SOUTHEAST
DISTRICT : OTTAWA-CARLETON, REG. MUN.
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : OTTAWA RIVER
MINOR BASIN : OTTAWA RIVER
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 450,000

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	422.90	410.90	489.60	514.10	520.80	485.10	450.90	448.20	434.50	427.30	471.50	450.00	460.48	
BOD5														
INFLUENT (MG/L)	116.0	121.0	98.0	100.0	90.0	116.4	96.0	76.0	109.0	122.0	98.0	120.0	105.2	
EFFLUENT (MG/L)	59.1	54.6	53.2	43.3	34.2	30.3	24.8	29.5	33.9	38.1	29.9	53.3	40.4*	
LOADING (KG/D)	4993.39	2435.14	6046.72	2260.53	7811.36	4698.53	1182.32	3221.90	4729.55	6280.13	4097.85	3985.00	18603.39*	
PERCENT REMOVAL	49	55	46	57	62	74	74	61	69	69	69	56	62	
PERCENT REMOVAL LIMITS													50	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	144.0	148.0	141.0	151.0	127.0	142.2	148.0	108.0	137.0	140.0	150.0	167.0	141.9	
EFFLUENT (MG/L)	49.5	55.4	61.0	51.4	50.8	41.6	42.9	37.5	52.6	39.4	47.7	60.7	49.2*	
LOADING (KG/D)	933.55	2763.86	9865.60	6424.74	6456.64	180.16	9343.61	6807.50	2854.70	6835.62	2490.55	7315.00	22655.62*	
PERCENT REMOVAL	66	63	57	66	60	71	71	65	62	72	68	64	65*	
PERCENT REMOVAL LIMITS													70	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	4.1	3.9	3.6	3.3	3.3	3.7	4.0	3.5	4.9	4.5	3.8	4.1	3.9	
EFFLUENT (MG/L)	2.7*	2.2*	2.2*	2.0*	1.7*	1.4*	1.4*	1.4*	2.1*	1.8*	1.5*	2.4*	1.9	12
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	1141.83	903.98	1077.12	1028.20	885.36	679.14	631.26	627.48	912.45	769.14	707.25	1080.00	874.91*	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	50%	YES
SS	70%	NO
TP	1.0 MG/L	NO

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED ANNUALLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES

	START DATE	END DATE	ANTICIPATED COMPLIANCE
FACILITY EXPANSION/UPGRADING - CONSTRUCTION INITIATED	1988	1990/03	1991

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : GOULBOURN
PLANT : MUNSTER LAGOON
WORKS NUMBER : 120001529
TREATMENT : LAGOON AND SPRAY
: SEASONAL DISCHARGE
:
DESIGN CAPACITY : 0.36 (1000 M3)

REGION : SOUTHEAST
DISTRICT : OTTAWA-CARLETON, REG. MUN.
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : NO DISC.TO SURFACE WATER
MINOR BASIN : OTTAWA RIVER
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 1,300

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BOD5														
INFLUENT (MG/L)	ND	ND	ND	32.0	ND	ND	ND	ND	ND	ND	ND	ND	32.0	
EFFLUENT (MG/L)	ND	ND	ND	36.5	ND	ND	ND	ND	ND	ND	ND	ND	36.5	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
SUSPENDED SOLIDS														
INFLUENT (MG/L)	ND	ND	ND	43.0	ND	ND	ND	ND	ND	ND	ND	ND	43.0	
EFFLUENT (MG/L)	ND	ND	ND	50.0	ND	ND	ND	ND	ND	ND	ND	ND	50.0	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	ND	ND	ND	3.2	ND	ND	ND	ND	ND	ND	ND	ND	3.2	
EFFLUENT (MG/L)	ND	ND	ND	2.3	ND	ND	ND	ND	ND	ND	ND	ND	2.3	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	NO DIRECT DISCHARGE
SS	40.0 MG/L	NO DIRECT DISCHARGE
TP	NA	NO DIRECT DISCHARGE

NO REMEDIAL MEASURES REPORTED

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : HAGARTY & RICHARDS
PLANT : KILLALOE STN.WPCP
WORKS NUMBER : 110001532
TREATMENT : EXTENDED AERATION
: PHOSPHORUS REMOVAL-CONTINUOUS
:
DESIGN CAPACITY : 0.51 (1000 M3)

REGION : SOUTHEAST
DISTRICT : RENFREW
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : BRUDENELL CREEK
MINOR BASIN : OTTAWA RIVER
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 670

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.17	0.14	0.19	0.40	0.28	0.32	0.19	0.19	0.17	0.21	0.27	0.22	0.23	
BOD5														
INFLUENT (MG/L)	218.0	218.0	203.0	153.0	130.0	49.0	73.0	73.0	200.0	ND	119.0	300.0	157.8	
EFFLUENT (MG/L)	3.0	13.5	2.0	2.0	2.0	1.0	3.0	3.0	2.1	3.0	1.5	2.0	3.2	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	0.51	1.89	0.38	0.80	0.56	0.32	0.57	0.57	0.35	0.63	0.40	0.44	0.74	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	223.0	291.0	267.0	212.0	193.0	143.0	164.0	164.0	249.0	ND	138.0	242.0	207.8	
EFFLUENT (MG/L)	8.2	7.8	7.0	8.2	7.2	8.0	7.5	7.5	7.9	9.4	7.8	6.3	7.7	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	1.39	1.09	1.33	3.28	2.01	2.56	1.42	1.42	1.34	1.97	2.10	1.38	1.77	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	7.6	7.5	8.1	7.1	6.1	4.7	6.1	6.1	7.4	ND	6.7	6.1	6.7	
EFFLUENT (MG/L)	1.0	1.0	0.9	0.6	0.6	0.5	0.7	0.7	0.8	0.6	0.8	0.6	0.7	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	0.17	0.14	0.17	0.24	0.16	0.16	0.13	0.13	0.13	0.12	0.21	0.13	0.16	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : HAWKESBURY
PLANT : HAWKESBURY WPCP
WORKS NUMBER : 1100022283
TREATMENT : MODIFIED ACTIVATED SLUDGE
: PHOSPHOROUS REMOVAL-CONTINUOUS
:
DESIGN CAPACITY : 12.27 (1000 M3)

REGION : SOUTHEAST
DISTRICT : PRESCOTT AND RUSSELL
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : OTTAWA RIVER
MINOR BASIN : OTTAWA RIVER
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 9,680

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	6.38	6.07	8.14	9.95	8.46	9.24	7.51	8.00	7.01	7.63	11.26	5.35	7.92	
BODS														
INFLUENT (MG/L)	ND	34.0	44.0	42.0	55.0	98.0	62.0	56.0	56.0	94.0	80.0	58.0	61.7	
EFFLUENT (MG/L)	ND	12.0	12.0	2.0	11.0	11.4	6.5	5.2	11.0	5.8	2.9	7.1	7.9	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	72.84	97.68	19.90	93.06	105.33	48.81	41.60	77.11	44.25	32.65	37.98	62.57	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	99.0	76.0	128.0	81.0	126.0	160.0	198.0	92.0	134.0	97.0	83.0	85.0	113.3	
EFFLUENT (MG/L)	15.0	25.8	50.8	19.3	15.0	11.1	19.0	20.8	14.1	14.2	17.3	9.7	19.3	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	95.70	156.60	413.51	192.03	126.90	102.56	142.69	166.40	98.84	108.34	194.79	51.89	152.86	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	4.8	3.2	3.1	2.7	3.0	4.2	3.4	3.3	3.9	3.8	2.7	3.4	3.5	
EFFLUENT (MG/L)	0.9	0.7	1.0	0.3	0.4	0.7	0.7	0.8	0.9	0.6	0.8	0.7	0.7	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	5.74	4.24	8.14	2.98	3.38	6.46	5.25	6.40	6.30	4.57	9.00	3.74	5.54	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : IROQUOIS
PLANT : IROQUOIS WPCP
WORKS NUMBER : 120000159
TREATMENT : PRIMARY
: PHOSPHORUS REMOVAL-CONTINUOUS
:
DESIGN CAPACITY : 5.00 (1000 M3)

REGION : SOUTHEAST
DISTRICT : STORMONT, DUNDAS AND GLENGARRY
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : ST. LAWRENCE RIVER
MINOR BASIN : ST. LAWRENCE
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 1,212

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	2.65	2.02	3.47	4.91	2.55	2.82	3.04	2.97	3.01	2.99	3.09	3.40	3.08	
BOD5														
INFLUENT (MG/L)	28.0	ND	40.0	24.0	36.0	32.0	ND	18.0	30.0	46.0	ND	68.0	35.8	
EFFLUENT (MG/L)	ND	ND	9.0	3.0	15.0	8.0	ND	5.0	19.0	19.0	ND	4.0	10.3	
LOADING (KG/D)	ND	ND	31.23	14.73	38.25	22.56	ND	14.85	57.19	56.81	ND	13.60	31.72	
PERCENT REMOVAL			78	88	58	75		72	37	59		94	71	
PERCENT REMOVAL LIMITS													50	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	136.0	ND	99.0	53.0	57.0	54.0	ND	33.0	70.0	70.0	ND	113.0	76.1	
EFFLUENT (MG/L)	ND	ND	36.0	12.0	47.6	4.8	ND	42.0	30.0	30.0	ND	8.0	26.3	
LOADING (KG/D)	ND	ND	124.92	58.92	121.38	13.53	ND	124.74	90.30	89.70	ND	27.20	81.00	
PERCENT REMOVAL			64	77	16	91		ND	57	57		93	65	
PERCENT REMOVAL LIMITS													70	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	3.7	ND	3.6	1.7	1.9	2.1	ND	1.8	2.5	2.5	ND	3.3	2.6	
EFFLUENT (MG/L)	ND	ND	0.6	0.1	0.2	0.3	ND	0.3	0.3	0.3	ND	0.1	0.3	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	2.08	0.49	0.51	0.84	ND	0.89	0.90	0.89	ND	0.34	0.92	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	50%	INSUFFICIENT DATA
SS	70%	INSUFFICIENT DATA
TP	1.0 MG/L	INSUFFICIENT DATA

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : KEMPTVILLE
PLANT : KEMPTVILLE WPCP (TERTIARY PROPSED)
WORKS NUMBER : 3210000115
TREATMENT : PRIMARY
: PHOSPHORUS REMOVAL CONTINUOUS
:
DESIGN CAPACITY : 2.27 (1000 M3)

REGION : SOUTHEAST
DISTRICT : LEEDS AND GRENVILLE
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : KEMPTVILLE CREEK
MINOR BASIN : OTTAWA RIVER
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 2,400

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.86	1.61	1.78	2.65	3.17	2.35	1.83	1.84	1.68	2.03	2.86	2.62	2.19	
BOD														
INFLUENT (MG/L)	60.0	78.0	110.0	40.0	42.0	36.0	36.0	104.0	70.0	46.0	64.0	40.0	60.5	
EFFLUENT (MG/L)	13.0	33.0	35.0	13.0	6.0	14.0	12.0	12.0	28.0	11.0	14.0	15.0	17.2	
LOADING (KG/D)	24.18	53.13	62.30	34.45	19.02	32.90	21.96	22.08	47.04	22.33	40.04	39.30	37.67	
PERCENT REMOVAL	78	58	68	68	86	61	67	88	60	76	78	63	72	
PERCENT REMOVAL LIMITS													50	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	45.0	67.0	140.0	39.0	66.0	44.0	32.0	142.0	68.0	119.0	58.0	80.0	75.0	
EFFLUENT (MG/L)	18.0	18.0	22.0	16.0	15.0	14.0	15.0	8.0	19.0	18.0	15.0	35.0	17.8	
LOADING (KG/D)	33.48	28.98	39.16	42.40	47.55	32.90	27.45	14.72	31.92	36.54	42.90	91.70	38.98	
PERCENT REMOVAL	60	73	84	59	77	68	53	94	72	85	74	56	76	
PERCENT REMOVAL LIMITS													70	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	3.4	5.0	5.2	3.2	2.5	4.9	3.5	5.6	5.2	5.6	6.4	3.8	4.5	
EFFLUENT (MG/L)	1.7*	1.9*	2.7*	1.3*	1.1*	1.4*	1.4*	1.3*	2.7*	2.4*	1.9*	1.8*	1.8	12
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	3.16	3.05	4.80	3.44	3.48	3.29	2.56	2.39	4.53	4.87	5.43	4.71	3.94	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	50%	YES
SS	70%	YES
TP	1.0 MG/L	NO

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES	START DATE	END DATE	ANTICIPATED COMPLIANCE
OPERATIONAL/PROCESS - SAMPLING PROGRAM BEING MODIFIED	1989	1990/04	1995
OPERATIONAL/PROCESS - PHOSPHORUS REMOVAL BEING UPGRADED	1989	1990/01	1995
FACILITY EXPANSION/UPGRADING - FINAL DESIGN PHASE	1989	1994	1995

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : KINGSTON
PLANT : KINGSTON WPCP
WORKS NUMBER : 120001050
TREATMENT : PRIMARY
: PHOSPHORUS REMOVAL-CONTINUOUS
:
DESIGN CAPACITY : 61.37 (1000 M3)

REGION : SOUTHEAST
DISTRICT : FRONTENAC
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : ST.LAWRENCE RIVER
MINOR BASIN : ST. LAWRENCE
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 67,000

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	54.33	52.51	63.45	67.99	60.76	66.90	52.76	53.61	52.34	57.57	75.09	50.64	59.00	
BOD5														
INFLUENT (MG/L)	101.0	94.0	113.0	68.0	68.0	81.0	67.0	66.0	88.0	94.0	64.0	79.0	81.9	
EFFLUENT (MG/L)	22.0	40.0	33.0	20.0	18.0	23.0	21.0	22.0	26.0	23.0	21.0	33.0	25.2	
LOADING (KG/D)	1195.26	2100.40	2093.85	1359.80	1093.68	1538.70	1107.96	1179.42	1360.84	1324.11	1576.89	1671.12	1486.80	
PERCENT REMOVAL	78	57	71	71	74	72	69	67	70	76	67	58	69	
PERCENT REMOVAL LIMITS													50	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	91.0	74.0	125.0	88.0	75.0	72.0	68.0	75.0	93.0	85.0	67.0	78.0	82.6	
EFFLUENT (MG/L)	17.0	28.0	24.0	20.0	21.0	19.0	13.0	15.0	20.0	20.0	19.0	18.0	19.5	
LOADING (KG/D)	923.61	1470.28	1522.80	1359.80	1275.96	1271.10	685.88	804.15	1046.80	1151.40	1426.71	911.52	1150.50	
PERCENT REMOVAL	81	62	81	77	72	74	81	80	78	76	72	77	76	
PERCENT REMOVAL LIMITS													70	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	5.2	4.3	4.7	3.5	2.9	3.0	3.8	3.8	4.2	4.3	3.0	3.2	3.8	
EFFLUENT (MG/L)	0.7	1.0	0.7	0.4	0.5	0.6	0.6	0.6	0.7	0.6	0.8	0.6	0.7	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	38.03	52.51	44.41	27.19	30.38	40.14	31.65	32.16	36.63	34.54	60.07	30.38	41.30	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	50%	YES
SS	70%	YES
TP	1.0 MG/L	YES

NO REMEDIAL MEASURES REPORTED

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : KINGSTON TWP
PLANT : KINGSTON WPCP
WORKS NUMBER : 110000365
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL CONTINUOUS
:
DESIGN CAPACITY : 25.00 (1000 M3)

REGION : SOUTHEAST
DISTRICT : FRONTENAC
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : LAKE ONTARIO
MINOR BASIN : ONTARIO
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 28,000

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	16.22	15.64	18.67	21.60	20.99	22.16	17.53	17.83	19.96	20.61	26.31	16.62	19.51	
BOD5														
INFLUENT (MG/L)	112.0	102.0	95.0	89.0	98.0	122.0	147.0	194.0	223.0	201.0	160.0	187.0	144.2	
EFFLUENT (MG/L)	9.0	7.5	6.7	3.9	6.3	5.6	4.9	9.2	8.2	11.6	8.7	20.0	8.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	145.98	117.30	125.08	84.24	132.23	124.09	85.89	164.03	163.67	239.07	228.89	332.40	165.84	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	82.0	72.0	83.0	64.0	73.0	93.0	102.0	162.0	224.0	246.0	134.0	81.0	118.0	
EFFLUENT (MG/L)	6.0	6.4	5.6	5.2	5.1	8.2	4.7	6.1	3.8	4.9	5.0	4.8	5.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	97.32	100.09	104.55	112.32	107.04	181.71	82.39	108.76	75.84	100.98	131.55	79.77	107.31	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	4.6	4.5	4.2	3.7	6.2	4.4	5.3	6.1	5.2	6.6	3.4	6.2	5.0	
EFFLUENT (MG/L)	0.6	0.5	0.5	0.5	0.7	0.7	0.4	0.5	0.6	0.6	0.8	0.6	0.6	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	9.73	7.82	9.33	10.80	14.69	15.51	7.01	8.91	11.97	12.36	21.04	9.97	11.71	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NO REMEDIAL MEASURES REPORTED

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : L'ORIGNAL
PLANT : L'ORIGNAL WPCP
WORKS NUMBER : 110001701
TREATMENT : EXTENDED AERATION
:
:
DESIGN CAPACITY : 0.95 (1000 M3)

REGION : SOUTHEAST
DISTRICT : PRESCOTT AND RUSSELL
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : OTTAWA RIVER
MINOR BASIN : OTTAWA RIVER
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 1,523

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.59	0.54	0.80	0.93	0.80	0.80	0.65	0.73	0.68	0.81	1.16	0.65	0.76	
BOD5														
INFLUENT (MG/L)	ND	30.0	135.0	18.0	55.0	68.0	85.0	82.0	38.0	70.0	51.0	67.0	63.5	
EFFLUENT (MG/L)	ND	4.0	25.0	11.0	4.4	11.5	10.0	8.4	5.0	5.6	4.0	7.0	8.7	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	2.16	20.00	10.23	3.52	9.20	6.50	6.13	3.40	4.53	4.64	4.55	6.61	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	73.0	123.0	97.0	49.0	60.0	76.0	127.0	88.0	175.0	72.0	48.0	30.0	84.8	
EFFLUENT (MG/L)	12.0	13.4	23.0	11.4	15.2	20.0	30.2	25.2	21.6	13.2	13.4	10.5	17.4	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	7.08	7.23	18.40	10.60	12.16	16.00	19.63	18.39	14.68	10.69	15.54	6.82	13.22	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	3.9	4.2	5.0	2.8	3.2	1.8	4.1	3.9	3.7	2.9	1.8	2.3	3.3	
EFFLUENT (MG/L)	2.8	3.4	3.6	0.6	4.3	2.3	4.0	2.2	3.8	2.9	2.4	3.4	3.0	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	1.65	1.83	2.88	0.55	3.44	1.84	2.60	1.60	2.58	2.34	2.78	2.21	2.28	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	NA	NA

NO REMEDIAL MEASURES REPORTED

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : LANCASTER
PLANT : LANCASTER LAGOON
WORKS NUMBER : 110001925
TREATMENT : CONVENTIONAL LAGOON SEASONAL
:
:
DESIGN CAPACITY : 0.59 (1000 M3)

REGION : SOUTHEAST
DISTRICT : STORMONT, DUNDAS AND GLENGARRY
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : FINNEY CREEK
MINOR BASIN : ST. LAWRENCE
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 700

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.35	0.34	0.44	0.61	0.52	0.45	0.29	0.28	0.27	0.31	0.48	0.42	0.40	
LAGOON DISCHARGE	ND	ND	ND	42.41	35.32	ND	ND	ND	ND	ND	ND	ND	38.87	
BODS														
INFLUENT (MG/L)	ND	110.0	140.0	72.0	71.0	101.0	30.0	129.0	96.0	165.0	61.0	236.0	110.1	
EFFLUENT (MG/L)	ND	ND	ND	ND	3.8	ND	ND	ND	ND	ND	3.5	ND	3.7	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	ND	1.97	ND	ND	ND	ND	ND	1.68	ND	1.48	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	185.0	184.0	147.0	119.0	145.0	163.0	69.0	154.0	164.0	189.0	53.0	231.0	150.3	
EFFLUENT (MG/L)	ND	ND	ND	19.0	23.7	ND	ND	ND	ND	ND	11.9	ND	18.2	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	11.59	12.32	ND	ND	ND	ND	ND	5.71	ND	7.28	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	4.5	7.3	7.5	4.2	5.2	5.2	4.5	4.2	7.5	6.2	3.4	8.1	5.7	
EFFLUENT (MG/L)	ND	ND	ND	0.2	0.7	ND	ND	ND	ND	ND	2.3	ND	1.1	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	0.12	0.36	ND	ND	ND	ND	ND	1.10	ND	0.44	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	NA	NA

NO REMEDIAL MEASURES REPORTED

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : LEEDS & LANSDOWNE FRONT
PLANT : LANSDOWNE LAGOON
WORKS NUMBER : 110001934
TREATMENT : LAGOON AND SPRAY
:
:
DESIGN CAPACITY : 0.33 (1000 M3)

REGION : SOUTHEAST
DISTRICT : LEEDS AND GRENVILLE
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : NO DISC.TO SURFACE WATER
MINOR BASIN : ST. LAWRENCE
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 546

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.20	0.18	0.21	0.29	0.29	0.25	0.20	0.20	0.20	0.21	0.25	0.19	0.22	
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	18.86	20.73	12.86	ND	ND	ND	17.48	
BOD5														
INFLUENT (MG/L)	85.0	102.0	60.0	81.0	57.0	36.0	42.0	80.0	62.0	59.0	46.0	80.0	65.8	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	7.0	ND	ND	ND	ND	7.0	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	1.40	ND	ND	ND	ND	1.54	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	119.0	66.0	47.0	91.0	50.0	35.0	37.0	42.0	31.0	53.0	39.0	35.0	53.8	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	11.0	ND	ND	ND	ND	11.0	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	2.20	ND	ND	ND	ND	2.42	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	7.6	6.6	4.8	5.2	5.4	4.3	4.5	5.3	5.1	4.7	3.8	4.7	5.2	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	1.8	ND	ND	ND	ND	1.8	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	0.36	ND	ND	ND	ND	0.40	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	NO DIRECT DISCHARGE
SS	40.0 MG/L	NO DIRECT DISCHARGE
TP	NA	NO DIRECT DISCHARGE

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : MADOC
PLANT : MADOC LAGOON
WORKS NUMBER : 1100010051
TREATMENT : CONVENTIONAL LAGOON SEASONAL
: PHOSPHORUS REMOVAL - BATCH
:
DESIGN CAPACITY : 1.36 (1000 M3)

REGION : SOUTHEAST
DISTRICT : HASTINGS
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : DEER CREEK TO MOIRA LAKE
MINOR BASIN : ONTARIO
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 850

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.68	0.74	0.72	1.02	0.95	1.06	0.67	0.69	0.83	0.65	0.96	0.70	0.81	
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BOD5														
INFLUENT (MG/L)	153.0	111.0	107.0	94.0	93.0	89.0	137.0	125.0	142.0	106.0	76.0	137.0	114.2	
EFFLUENT (MG/L)	ND	ND	ND	7.0	8.7	ND	ND	ND	ND	ND	4.0	ND	6.6	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	7.14	8.26	ND	ND	ND	ND	ND	3.84	ND	5.35	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	153.0	141.0	157.0	119.0	197.0	82.0	169.0	123.0	142.0	123.0	97.0	173.0	139.7	
EFFLUENT (MG/L)	ND	ND	ND	36.0	19.8	ND	ND	ND	ND	ND	11.3	ND	22.4	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	36.72	18.81	ND	ND	ND	ND	ND	10.84	ND	18.14	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	5.6	4.4	3.4	4.3	4.2	4.2	7.2	6.5	6.7	6.8	4.3	6.4	5.3	
EFFLUENT (MG/L)	ND	ND	ND	0.5	0.4	ND	ND	ND	ND	ND	0.1	ND	0.3	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	0.51	0.38	ND	ND	ND	ND	ND	0.09	ND	0.24	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NO REMEDIAL MEASURES REPORTED

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : MARMORA
PLANT : MARMORA WPCP
WORKS NUMBER : 110001863
TREATMENT : EXTENDED AERATION
: PHOSPHORUS REMOVAL-CONTINUOUS
:
DESIGN CAPACITY : 0.86 (1000 M3)

REGION : SOUTHEAST
DISTRICT : HASTINGS
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : CROWE RIVER
MINOR BASIN : ONTARIO
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 1,067

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.78	0.74	0.76	0.82	0.76	0.99	0.59	0.52	0.68	0.72	1.14	0.71	0.77	
BOD5														
INFLUENT (MG/L)	157.0	125.0	92.0	87.0	79.0	130.0	99.0	125.0	134.0	115.0	67.0	84.0	107.8	
EFFLUENT (MG/L)	12.8	4.3	7.3	4.3	6.4	6.0	2.3	4.2	2.8	5.1	2.0	4.3	5.2	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	9.98	3.18	5.54	3.52	4.86	5.94	1.35	2.18	1.90	3.67	2.28	3.05	4.00	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	145.0	125.0	176.0	126.0	116.0	109.0	178.0	205.0	245.0	167.0	102.0	194.0	157.3	
EFFLUENT (MG/L)	16.6	7.5	18.3	18.0	10.0	12.7	14.0	9.8	12.9	10.6	15.4	13.6	13.3	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	12.94	5.55	13.90	14.76	7.60	12.57	8.26	5.09	8.77	7.63	17.55	9.65	10.24	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	3.9	3.0	3.2	3.2	3.3	3.2	4.6	5.4	4.5	4.2	3.0	3.4	3.7	
EFFLUENT (MG/L)	0.5	0.2	0.2	0.3	0.4	0.5	0.5	0.6	0.6	0.6	0.5	0.4	0.4	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	0.39	0.14	0.15	0.24	0.30	0.49	0.29	0.31	0.40	0.43	0.57	0.28	0.31	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : MAXVILLE
PLANT : MAXVILLE WASTE STAB POND (OP SEP 89)
WORKS NUMBER : 110002719
TREATMENT : CONVENTIONAL LAGOON ANNUAL
: PHOSPHORUS REMOVAL BATCH
:
DESIGN CAPACITY : 0.45 (1000 M3)

REGION : SOUTHEAST
DISTRICT : STORMONT, DUNDAS AND GLENGARRY
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : SCOTCH RIVER
MINOR BASIN : ST. LAWRENCE
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 800

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	ND	ND	ND	ND	ND	ND	ND	ND	0.32	0.05	0.10	0.13	0.15	
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BOD5														
INFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
SUSPENDED SOLIDS														
INFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	NA	NO DISCHARGE
SS	NA	NO DISCHARGE
TP	NA	NO DISCHARGE

NOTE:
BOD - HAS NO CRITERIA
SS - HAS NO CRITERIA
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : MERRICKVILLE
PLANT : MERRICKVILLE WPCP
WORKS NUMBER : 110001729
TREATMENT : EXTENDED AERATION
: PHOSPHORUS REMOVAL-CONTINUOUS
:
DESIGN CAPACITY : 0.50 (1000 M3)

REGION : SOUTHEAST
DISTRICT : LEEDS AND GRENVILLE
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : RIDEAU RIVER
MINOR BASIN : OTTAWA RIVER
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 797

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.38	0.35	0.47	0.67	0.73	0.55	0.39	0.37	0.36	0.35	0.55	0.39	0.46	
BOD5														
INFLUENT (MG/L)	55.0	76.0	114.0	48.0	43.0	50.0	78.0	71.0	92.0	64.0	70.0	129.0	74.2	
EFFLUENT (MG/L)	4.0	6.4	27.3	34.0	16.0	4.0	3.5	2.3	1.7	4.0	2.2	2.8	9.0	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	1.52	2.24	12.83	22.78	11.68	2.20	1.36	0.85	0.61	1.40	1.21	1.09	4.14	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	84.0	88.0	225.0	59.0	53.0	58.0	140.0	86.0	92.0	58.0	83.0	149.0	97.9	
EFFLUENT (MG/L)	15.0	11.6	56.8	58.0	19.0	9.0	7.8	6.0	8.1	6.4	12.2	15.5	18.8	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	5.70	4.06	26.69	38.86	13.87	4.95	3.04	2.22	2.91	2.24	6.71	6.04	8.65	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	5.2	4.9	6.7	3.3	4.3	4.8	6.7	5.6	4.9	4.1	4.8	4.4	5.0	
EFFLUENT (MG/L)	0.6	0.4	1.9*	1.9*	0.8	0.4	26.9*	0.6	0.7	0.5	0.6	0.6	3.0	3
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	0.22	0.14	0.89	1.27	0.58	0.22	10.49	0.22	0.25	0.17	0.33	0.23	1.38	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	NO

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES

	START DATE	END DATE	ANTICIPATED COMPLIANCE
COLLECTION SYSTEM - COLLECTION SYSTEM UNDER REVIEW			

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : MORRISBURG
PLANT : MORRISBURG WPCP
WORKS NUMBER : 120300168
TREATMENT : PRIMARY
: CONVENTIONAL LAGOON CONTINUOUS
:
DESIGN CAPACITY : 2.27 (1000 M3)

REGION : SOUTHEAST
DISTRICT : STORMONT, DUNDAS AND GLENGARRY
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : ST. LAWRENCE RIVER
MINOR BASIN : ST. LAWRENCE
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 2,350

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	2.74	2.64	2.67	3.29	3.27	3.31	2.81	2.93	2.48	2.71	3.32	2.67	2.90	
BOD5														
INFLUENT (MG/L)	16.0	22.0	98.0	10.0	300.0	190.0	14.0	24.0	44.0	60.0	ND	130.0	82.5	
EFFLUENT (MG/L)	21.0	26.0	29.0	17.0	11.0	20.0	10.0	11.0	23.0	18.0	25.0	18.0	19.1	
LOADING (KG/D)	57.54	68.64	77.43	55.93	35.97	66.20	28.10	32.23	57.04	48.78	83.00	48.06	55.39	
PERCENT REMOVAL	ND	ND	70	ND	96	89	29	54	48	70		86	77	
PERCENT REMOVAL LIMITS													30	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	5.0	19.0	78.0	25.0	261.0	117.0	12.0	27.0	25.0	33.0	ND	82.0	62.2	
EFFLUENT (MG/L)	21.0	13.0	24.0	12.0	40.0	20.0	14.0	40.0	90.0	65.2	78.0	30.0	37.3	
LOADING (KG/D)	57.54	34.32	64.08	39.48	130.80	66.20	39.34	117.20	223.20	176.69	258.96	80.10	108.17	
PERCENT REMOVAL	ND	32	69	52	85	83	ND	ND	ND	ND		63	40*	
PERCENT REMOVAL LIMITS													50	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	1.3	1.7	5.1	0.9	4.3	3.8	1.8	3.2	3.4	1.9	ND	3.7	2.8	
EFFLUENT (MG/L)	2.5	2.8	3.0	1.4	1.8	2.0	0.8	1.9	2.6	2.0	2.0	2.0	2.1	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	6.85	7.39	8.01	4.60	5.88	6.62	2.24	5.56	6.44	5.42	6.64	5.34	6.09	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	30%	YES
SS	50%	NO
TP	NA	NA

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES

START DATE	END DATE	ANTICIPATED COMPLIANCE

EQUIPMENT/MAINTENANCE - EXISTING EQUIPMENT BEING REPAIRED
NO ACTION - MARGINAL FAILURE-MONITORING LEVEL OF FAILED PARAMETER CLOSELY

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : NAPANEE
PLANT : NAPANEE WPCP
WORKS NUMBER : 120000186
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL-CONTINUOUS
:
DESIGN CAPACITY : 9.09 (1000 M3)

REGION : SOUTHEAST
DISTRICT : LENNOX & ADDINGTON
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : NAPANEE RIVER
MINOR BASIN : ONTARIO
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 7,500

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	4.68	4.29	5.61	6.93	6.19	6.47	5.27	6.15	5.78	5.90	10.05	5.56	6.07	
BOD5														
INFLUENT (MG/L)	221.0	142.0	147.0	89.0	77.0	77.0	66.0	123.0	119.0	83.0	68.0	90.0	108.5	
EFFLUENT (MG/L)	13.3	17.8	17.9	9.3	8.7	6.7	6.0	10.0	2.4	3.1	4.5	3.8	8.6	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	62.24	76.36	100.41	64.44	53.85	43.34	31.62	61.50	13.87	18.29	45.22	21.12	52.20	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	202.0	178.0	218.0	147.0	174.0	131.0	76.0	107.0	117.0	122.0	87.0	133.0	141.0	
EFFLUENT (MG/L)	13.0	23.8	20.4	16.4	10.7	14.0	12.5	15.0	11.1	13.5	10.6	10.0	14.3	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	60.84	102.10	114.44	113.65	66.23	90.58	65.87	92.25	64.15	79.65	106.53	55.60	86.80	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	9.4	8.0	9.2	7.6	7.2	7.6	5.4	10.4	7.2	8.7	4.9	6.9	7.7	
EFFLUENT (MG/L)	0.6	1.0	1.2*	0.9	0.7	0.8	1.0	1.6*	1.1*	0.8	0.7	0.8	0.9	3
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	2.80	4.29	6.73	6.23	4.33	5.17	5.27	9.84	6.35	4.72	7.03	4.44	5.46	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	NO

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES

	START DATE	END DATE	ANTICIPATED COMPLIANCE
OPERATIONAL/PROCESS - MONITORING PROCEDURES BEING UPGRADED		1989/12	1990

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : NEPEAN
PLANT : WATTS CREEK WPCP
WORKS NUMBER : 1210030701
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL CONTINUOUS
:
DESIGN CAPACITY : 29.54 (1000 M3)

REGION : SOUTHEAST
DISTRICT : OTTAWA CARLETON, REG. MUN.
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : WATTS CREEK
MINOR BASIN : OTTAWA RIVER
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 52,500

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	25.10	24.00	31.60	34.70	33.50	28.70	24.60	24.00	23.60	25.20	31.30	25.50	27.65	
BOD5														
INFLUENT (MG/L)	129.0	121.0	107.0	103.0	104.0	110.0	82.0	90.0	114.0	129.0	78.0	106.0	106.1	
EFFLUENT (MG/L)	9.0	15.0	17.0	13.0	17.0	11.0	9.0	11.0	6.0	7.0	6.0	3.0	10.3	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	225.90	360.00	537.20	451.10	569.50	315.70	221.40	264.00	141.60	176.40	187.80	76.50	284.80	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	148.0	137.0	118.0	159.0	136.0	142.0	100.0	120.0	133.0	138.0	111.0	164.0	133.8	
EFFLUENT (MG/L)	11.0	12.0	12.0	13.0	12.0	8.0	10.0	8.0	8.0	11.0	9.0	12.0	10.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	276.10	288.00	379.20	451.10	402.00	229.60	246.00	192.00	188.80	277.20	281.70	306.00	290.33	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	5.4	5.3	4.3	4.3	4.2	4.2	4.0	4.9	4.8	5.0	3.6	5.1	4.6	
EFFLUENT (MG/L)	1.0	0.9	0.9	1.0	1.0	0.9	1.0	0.9	1.1*	0.9	1.0	0.9	1.0	1
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	25.10	21.60	28.44	34.70	33.50	25.83	24.60	21.60	25.96	22.68	31.30	22.95	27.65	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	NO

NO REMEDIAL MEASURES REPORTED

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : OSNABRUCK
PLANT : INGLESIDE WPCP
WORKS NUMBER : 120000140
TREATMENT : PRIMARY
:
:
DESIGN CAPACITY : 1.57 (1000 M3)

REGION : SOUTHEAST
DISTRICT : STORMONT, DUNDAS AND GLENGARRY
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : ST. LAWRENCE RIVER
MINOR BASIN : ST. LAWRENCE
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 1,500

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.76	0.66	1.06	1.49	1.46	1.62	0.86	0.96	0.80	1.10	1.90	0.70	1.11	
BOD5														
INFLUENT (MG/L)	96.0	104.0	295.0	26.0	165.0	64.0	90.0	ND	110.0	34.0	15.0	105.0	100.4	
EFFLUENT (MG/L)	57.0	52.0	86.0	9.0	58.0	19.0	45.0	ND	7.0	31.0	17.0	54.0	39.5	
LOADING (KG/D)	43.32	34.32	91.16	13.41	84.68	30.78	38.70	ND	5.60	34.10	32.30	37.80	43.85	
PERCENT REMOVAL	41	50	71	65	65	70	50		94	09	ND	49	61	
PERCENT REMOVAL LIMITS													30	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	84.0	98.0	6,220.0	55.0	280.0	223.0	154.0	ND	180.0	48.0	16.0	111.0	679.0	
EFFLUENT (MG/L)	50.0	47.0	168.0	25.0	180.0	50.0	42.0	ND	50.0	29.0	15.0	38.0	63.1	
LOADING (KG/D)	38.00	31.02	178.08	37.25	262.80	81.00	36.12	ND	40.00	31.90	28.50	26.60	70.04	
PERCENT REMOVAL	40	52	97	55	36	78	73		72	40	06	66	91	
PERCENT REMOVAL LIMITS													50	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	5.1	5.6	9.5	2.3	5.3	4.5	5.2	ND	5.1	6.4	1.5	5.5	5.1	
EFFLUENT (MG/L)	4.1	3.8	6.4	1.7	4.2	2.1	4.0	ND	4.6	2.7	1.1	ND	3.5	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	3.11	2.50	6.78	2.53	6.13	3.40	3.44	ND	3.68	2.97	2.09	ND	3.89	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	30%	YES
SS	50%	YES
TP	NA	NA

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : PEMBROKE
PLANT : PEMBROKE WPCP
WORKS NUMBER : 120000630
TREATMENT : PRIMARY
: PHOSPHORUS REMOVAL-CONTINUOUS
:
DESIGN CAPACITY : 18.18 (1000 M3)

REGION : SOUTHEAST
DISTRICT : RENFREW
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : OTTAWA RIVER
MINOR BASIN : OTTAWA RIVER
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 17,000

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	12.58	12.45	13.10	13.04	12.93	12.70	12.57	12.59	12.54	12.44	12.52	12.61	12.67	
BOD5														
INFLUENT (MG/L)	100.0	96.0	114.0	114.0	68.0	73.0	76.0	56.0	63.0	120.0	118.0	122.0	93.3	
EFFLUENT (MG/L)	24.5	15.0	18.8	25.0	12.5	15.0	13.8	11.8	13.0	12.0	15.5	33.0	17.5	
LOADING (KG/D)	308.21	186.75	246.28	326.00	161.62	190.50	173.46	148.56	163.02	149.28	194.06	416.13	221.73	
PERCENT REMOVAL	76	84	84	78	82	79	82	79	79	90	87	73	81	
PERCENT REMOVAL LIMITS													50	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	89.0	92.0	125.0	107.0	112.0	125.0	106.0	72.0	84.0	93.0	121.0	98.0	102.0	
EFFLUENT (MG/L)	11.7	11.9	16.8	13.3	14.3	16.7	13.8	9.5	11.0	12.0	15.9	13.1	13.3	
LOADING (KG/D)	147.18	148.15	220.08	173.43	184.89	212.09	173.46	119.60	137.94	149.28	199.06	165.19	168.51	
PERCENT REMOVAL	87	87	87	88	87	87	87	87	87	87	87	87	87	
PERCENT REMOVAL LIMITS													70	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	4.5	4.3	4.4	2.9	ND	3.6	3.3	3.2	3.3	3.7	3.3	4.4	3.7	
EFFLUENT (MG/L)	0.7	0.6	0.6	0.6	0.1	0.7	0.8	0.6	0.7	0.7	0.7	0.9	0.6	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	8.80	7.47	7.86	7.82	1.29	8.89	10.05	7.55	8.77	8.70	8.76	11.34	7.60	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	50%	YES
SS	70%	YES
TP	1.0 MG/L	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : PERTH
PLANT : PERTH LAGOON
WORKS NUMBER : 120000881
TREATMENT : CONVENTIONAL LAGOON CONTINUOUS
: PHOSPHORUS REMOVAL-CONTINUOUS
:
DESIGN CAPACITY : 5.91 (1000 M3)

REGION : SOUTHEAST
DISTRICT : LANARK
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : TAY RIVER
MINOR BASIN : OTTAWA RIVER
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 5,648

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	5.76	5.32	5.20	6.61	6.31	5.43	5.05	3.62	4.14	4.15	4.77	4.16	5.04	
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BOD5														
INFLUENT (MG/L)	335.0	108.0	88.0	205.0	255.0	46.0	155.0	130.0	175.0	96.0	48.0	600.0	186.8	
EFFLUENT (MG/L)	9.0	55.0	53.0	23.0	11.0	9.0	6.0	4.0	4.0	4.0	6.0	18.0	16.8	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	51.84	292.60	275.60	152.03	69.41	48.87	30.30	14.48	16.56	16.60	28.62	74.88	84.67	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	91.0	122.0	135.0	61.0	52.0	67.0	146.0	286.0	78.0	72.0	82.0	250.0	120.2	
EFFLUENT (MG/L)	14.0	24.0	30.0	11.0	17.0	12.0	9.0	3.0	2.8	14.0	10.0	14.0	13.4	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	80.64	127.68	156.00	72.71	107.27	65.16	45.45	10.86	11.59	58.10	47.70	58.24	67.54	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	1.8	2.6	4.5	2.6	3.2	2.0	4.0	4.5	2.8	3.7	3.0	15.8	4.2	
EFFLUENT (MG/L)	0.6	0.5	0.6	0.4	0.2	0.3	0.5	0.5	0.5	0.4	0.8	0.8	0.5	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	3.45	2.66	3.12	2.64	1.26	1.62	2.52	1.81	2.07	1.66	3.81	3.32	2.52	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	1.0 MG/L	YES

NO REMEDIAL MEASURES REPORTED

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : PETAWAWA
PLANT : PETAWAWA WPCP
WORKS NUMBER : 120000587
TREATMENT : PRIMARY
: PHOSPHORUS REMOVAL-CONTINUOUS
:
DESIGN CAPACITY : 4.54 (1000 M3)

REGION : SOUTHEAST
DISTRICT : RENFREW
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : OTTAWA RIVER
MINOR BASIN : OTTAWA RIVER
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 9,800

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	3.97	4.54	5.10	5.04	4.50	4.71	4.69	4.82	5.15	5.42	4.45	3.73	4.68	
BODS														
INFLUENT (MG/L)	123.0	168.0	140.0	140.0	119.0	102.0	118.0	114.0	162.0	132.0	115.0	192.0	135.4	
EFFLUENT (MG/L)	29.0	56.2	43.6	42.8	29.6	18.0	12.7	9.9	28.8	34.6	15.6	32.7	29.5	
LOADING (KG/D)	115.13	255.14	222.36	215.71	133.20	84.78	59.56	47.71	148.32	187.53	69.42	121.97	138.06	
PERCENT REMOVAL	76	67	69	69	75	82	89	91	82	74	86	83	78	
PERCENT REMOVAL LIMITS													50	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	94.0	148.0	123.0	113.0	120.0	100.0	123.0	113.0	178.0	132.0	151.0	142.0	128.1	
EFFLUENT (MG/L)	13.7	14.3	34.0	16.5	16.7	11.9	15.2	9.0	12.7	31.0	20.7	12.7	17.4	
LOADING (KG/D)	54.38	64.92	173.40	83.16	75.15	56.04	71.28	43.38	65.40	168.02	92.11	47.37	81.43	
PERCENT REMOVAL	85	90	72	85	86	88	88	92	93	77	86	91	86	
PERCENT REMOVAL LIMITS													70	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	4.9	5.7	4.9	5.3	4.7	5.4	5.6	5.6	6.9	6.2	7.4	6.3	5.7	
EFFLUENT (MG/L)	0.7	0.4	0.4	0.7	0.5	0.5	0.6	0.4	0.6	1.2*	0.6	0.3	0.6	1
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	2.77	1.81	2.04	3.52	2.25	2.35	2.81	1.92	3.09	6.50	2.67	1.11	2.81	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	50%	YES
SS	70%	YES
TP	1.0 MG/L	NO

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES	START DATE	END DATE	ANTICIPATED COMPLIANCE
NO ACTION - MARGINAL FAILURE-MONITORING LEVEL OF FAILED PARAMETER CLOSELY			1990

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : PICTON
PLANT : PICTON WPCP
WORKS NUMBER : 120000667
TREATMENT : CONTACT STABILIZATION
: PHOSPHORUS REMOVAL-CONTINUOUS
:
DESIGN CAPACITY : 4.54 (1000 M3)

REGION : SOUTHEAST
DISTRICT : PRINCE EDWARD
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : PICTON BAY
MINOR BASIN : ONTARIO
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 4,500

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	2.84	2.62	3.29	3.81	6.64	3.00	2.52	2.40	2.13	2.10	2.97	2.36	3.06	
BOD5														
INFLUENT (MG/L)	72.0	82.0	100.0	45.0	49.0	47.0	70.0	37.0	69.0	57.0	76.0	31.0	61.3	
EFFLUENT (MG/L)	11.5	14.5	17.5	11.5	8.5	9.0	7.5	7.0	8.0	9.7	7.0	18.0	10.8	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	32.66	37.99	57.57	43.81	56.44	27.00	18.90	16.80	17.04	20.37	20.79	42.48	33.05	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	65.0	99.0	156.0	52.0	49.0	110.0	45.0	38.0	73.0	48.0	73.0	25.0	69.4	
EFFLUENT (MG/L)	11.5	15.0	24.0	14.0	7.0	5.0	4.0	3.5	8.9	14.3	16.5	17.0	11.7	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	32.66	39.30	78.96	53.34	46.48	15.00	10.08	8.40	18.95	30.03	49.00	40.12	35.80	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	3.6	5.2	4.4	2.8	2.8	4.1	3.5	3.5	4.7	4.3	4.9	2.1	3.8	
EFFLUENT (MG/L)	0.5	0.6	0.9	0.4	0.2	0.3	0.4	0.5	0.4	0.4	0.7	0.7	0.5	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	1.42	1.57	2.96	1.52	1.32	0.90	1.00	1.20	0.85	0.84	2.07	1.65	1.53	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : PITTSBURG
PLANT : CANA WPCP
WORKS NUMBER : 110001505
TREATMENT : EXTENDED AERATION
:
:
DESIGN CAPACITY : 0.09 (1000 M3)

REGION : SOUTHEAST
DISTRICT : FRONTENAC
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : CATARAQUI RIVER
MINOR BASIN : ST. LAWRENCE
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 108

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.04	0.04	0.05	0.07	0.07	0.06	0.02	0.02	0.01	0.02	0.07	0.04	0.04	
BOD5														
INFLUENT (MG/L)	106.0	88.0	92.0	54.0	67.0	96.0	118.0	173.0	199.0	154.0	76.0	105.0	110.7	
EFFLUENT (MG/L)	4.9	3.6	10.4	5.0	3.6	4.5	3.6	3.4	4.3	5.9	6.0	4.2	5.0	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	0.19	0.14	0.52	0.35	0.25	0.27	0.07	0.06	0.04	0.11	0.42	0.16	0.20	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	89.0	79.0	94.0	39.0	99.0	81.0	123.0	120.0	138.0	99.0	72.0	72.0	92.1	
EFFLUENT (MG/L)	22.8	17.0	32.2	12.6	17.5	15.7	10.4	13.5	15.8	16.0	25.8	24.6	18.7	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	0.91	0.68	1.61	0.88	1.22	0.94	0.20	0.27	0.15	0.32	1.80	0.98	0.75	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	5.7	5.7	6.2	2.3	3.7	5.6	5.9	6.9	8.4	6.3	2.8	4.9	5.4	
EFFLUENT (MG/L)	2.8	2.7	3.4	1.4	2.3	2.9	2.6	4.4	4.4	4.0	3.9	2.9	3.1	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	0.11	0.10	0.17	0.09	0.16	0.17	0.05	0.08	0.04	0.08	0.27	0.11	0.12	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	NA	NA

NO REMEDIAL MEASURES REPORTED

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : PLANTAGENET
PLANT : PLANTAGENET LAGOON
WORKS NUMBER : 110001621
TREATMENT : CONVENTIONAL LAGOON SEASONAL
:
:
DESIGN CAPACITY : 0.59 (1000 M3)

REGION : SOUTHEAST
DISTRICT : PRESCOTT AND RUSSELL
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : SOUTH NATION RIVER
MINOR BASIN : OTTAWA RIVER
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 876

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.44	0.44	0.59	0.67	0.64	0.65	0.71	0.69	0.64	0.75	0.93	0.52	0.64	
LAGOON DISCHARGE	ND	ND	ND	ND	8.00	103.00	ND	ND	ND	ND	107.50	22.70	60.30	
BOD5														
INFLUENT (MG/L)	ND	ND	170.0	ND	106.0	84.0	118.0	202.0	125.0	139.0	165.0	45.0	128.2	
EFFLUENT (MG/L)	ND	ND	ND	ND	5.5	ND	ND	ND	ND	ND	2.8	4.0	4.1	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	ND	3.52	ND	ND	ND	ND	ND	2.60	2.08	2.62	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	172.0	190.0	241.0	164.0	322.0	269.0	277.0	558.0	432.0	234.0	150.0	104.0	259.4	
EFFLUENT (MG/L)	ND	ND	ND	ND	8.3	ND	ND	ND	ND	ND	9.8	4.0	7.4	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	ND	5.31	ND	ND	ND	ND	ND	9.11	2.08	4.74	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	5.3	7.1	7.5	3.0	7.1	5.3	5.4	7.1	8.4	3.3	6.6	3.8	5.8	
EFFLUENT (MG/L)	ND	ND	ND	ND	0.6	ND	ND	ND	ND	ND	0.3	0.4	0.4	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	0.38	ND	ND	ND	ND	ND	0.27	0.20	0.26	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	1.0 MG/L	YES

NO REMEDIAL MEASURES REPORTED

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : PRESCOTT
PLANT : EDWARDSBURGH WPCP
WORKS NUMBER : 110001122
TREATMENT : PRIMARY
: PHOSPHORUS REMOVAL CONTINUOUS
:
DESIGN CAPACITY : 5.68 (1000 M3)

REGION : SOUTHEAST
DISTRICT : LEEDS AND GRENVILLE
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : ST. LAWRENCE RIVER
MINOR BASIN : ST. LAWRENCE
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 4,595

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	3.98	3.76	4.71	5.50	5.35	5.08	3.95	3.36	3.47	3.75	5.28	3.82	4.33	
BOD5														
INFLUENT (MG/L)	75.0	90.0	86.0	65.0	51.0	29.0	39.0	56.0	49.0	56.0	28.0	47.0	55.9	
EFFLUENT (MG/L)	30.0	23.5	17.0	12.0	19.0	8.0	14.0	14.0	13.0	15.5	14.3	20.3	16.7	
LOADING (KG/D)	119.40	88.36	80.07	66.00	119.0	40.64	55.30	47.04	45.11	58.12	75.50	77.54	72.67	
PERCENT REMOVAL	60	74	80	82	63	72	64	75	73	72	49	57	70	
PERCENT REMOVAL LIMITS													50	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	102.0	168.0	133.0	122.0	121.0	82.0	99.0	149.0	117.0	123.0	88.0	118.0	118.5	
EFFLUENT (MG/L)	21.0	22.0	18.5	13.0	17.5	16.0	17.0	17.0	22.7	19.6	13.8	14.5	17.7	
LOADING (KG/D)	83.58	82.72	87.13	71.50	93.62	81.28	67.15	57.12	78.76	73.50	72.86	55.39	76.64	
PERCENT REMOVAL	79	87	86	89	86	80	83	89	81	84	84	88	85	
PERCENT REMOVAL LIMITS													70	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	3.1	5.2	3.8	3.2	2.9	ND	2.7	4.6	3.3	3.2	1.5	3.0	3.3	
EFFLUENT (MG/L)	0.6	0.7	0.5	0.3	0.4	0.2	0.4	0.6	0.8	0.5	0.2	ND	0.5	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	2.38	2.63	2.35	1.65	2.14	1.01	1.58	2.01	2.77	1.87	1.05	ND	2.17	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	50%	YES
SS	70%	YES
TP	1.0 MG/L	YES

NOTE:
BOD ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES	START DATE	END DATE	ANTICIPATED COMPLIANCE
OPERATIONAL/PROCESS - PROCESS CONTROL BEING UPGRADED			
OPERATIONAL/PROCESS - PHASING OUT EXISTING FACILITY			1989

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : RENFREW
PLANT : RENFREW WPCP
WORKS NUMBER : 120000603
TREATMENT : PRIMARY
: PHOSPHORUS REMOVAL-CONTINUOUS
:
DESIGN CAPACITY : 8.63 (1000 M3)

REGION : SOUTHEAST
DISTRICT : RENFREW
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : BONNECHERE RIVER
MINOR BASIN : OTTAWA RIVER
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 8,200

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	4.34	4.09	6.00	5.78	6.07	5.80	5.74	4.86	7.05	7.05	9.82	5.07	5.97	
BOD5														
INFLUENT (MG/L)	72.0	86.0	24.0	53.0	16.0	20.0	29.0	26.0	13.0	60.0	28.0	135.0	46.8	
EFFLUENT (MG/L)	20.0	16.0	10.0	11.5	6.0	5.0	6.5	8.0	4.4	7.6	7.0	22.0	10.3	
LOADING (KG/D)	86.80	65.44	60.00	66.47	36.42	29.00	37.31	38.88	31.02	53.58	68.74	111.54	61.49	
PERCENT REMOVAL	72	81	58	78	63	75	78	69	66	87	75	84	78	
PERCENT REMOVAL LIMITS													50	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	104.0	123.0	81.0	214.0	42.0	61.0	60.0	52.0	37.0	62.0	57.0	119.0	84.3	
EFFLUENT (MG/L)	15.0	20.0	29.0	14.0	9.0	8.0	12.0	10.0	6.0	11.0	9.0	21.0	13.7	
LOADING (KG/D)	65.10	81.80	174.00	80.92	54.63	46.40	68.88	48.60	42.30	77.55	88.38	106.47	81.79	
PERCENT REMOVAL	86	84	64	93	79	87	80	81	84	82	84	82	84	
PERCENT REMOVAL LIMITS													70	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	3.7	4.0	1.6	3.7	0.8	2.3	2.3	2.1	0.8	3.7	1.5	5.5	2.7	
EFFLUENT (MG/L)	0.2	0.4	0.8	0.4	0.2	0.2	0.7	0.4	0.2	0.4	0.2	0.5	0.4	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	0.86	1.63	4.80	2.31	1.21	1.16	4.01	1.94	1.41	2.82	1.96	2.53	2.39	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	50%	YES
SS	70%	YES
TP	1.0 MG/L	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : ROCKLAND
PLANT : ROCKLAND LAGOON
WORKS NUMBER : 1100001159
TREATMENT : AERATED CELL PLUS LAGOON
: CONTINUOUS DISCHARGE
:
DESIGN CAPACITY : 3.34 (1000 M3)

REGION : SOUTHEAST
DISTRICT : PRESCOTT AND RUSSELL
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : OTTAWA RIVER
MINOR BASIN : OTTAWA RIVER
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 6,000

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.80	1.75	2.29	2.82	2.44	2.49	2.07	2.14	2.08	2.28	3.05	2.18	2.28	
LAGOON DISCHARGE	55.80	49.00	70.90	84.60	75.61	74.82	64.02	66.24	62.40	70.79	91.50	67.56	69.44	
BOD5														
INFLUENT (MG/L)	ND	ND	ND	210.0	68.0	64.0	106.0	156.0	148.0	108.0	132.0	115.0	123.0	
EFFLUENT (MG/L)	ND	ND	ND	7.0	6.8	6.3	11.8	15.0	32.3	6.0	5.7	31.0	13.5	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	19.74	16.59	15.68	24.42	32.10	67.18	13.68	17.38	67.58	30.78	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	282.0	233.0	101.0	121.0	149.0	88.0	197.0	239.0	144.0	191.0	303.0	295.0	195.3	
EFFLUENT (MG/L)	21.0	29.0	33.0	23.5	21.6	18.3	28.0	38.4	18.1	19.8	7.1	17.3	22.9	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	37.80	50.75	75.57	66.27	52.70	45.56	57.96	82.17	37.64	45.14	21.65	37.71	52.21	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.1	5.0	5.1	4.0	4.3	5.3	5.1	5.5	5.5	5.8	5.1	6.7	5.3	
EFFLUENT (MG/L)	2.5	3.6	3.6	2.9	2.0	3.3	1.7	2.3	2.5	3.0	2.6	3.3	2.8	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	4.50	6.30	8.24	8.17	4.88	8.21	3.51	4.92	5.20	6.84	7.93	7.19	6.38	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	NA	NA

NO REMEDIAL MEASURES REPORTED

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : RUSSELL
PLANT : EMBRUN P.V.LAGOON
WORKS NUMBER : 120002004
TREATMENT : CONVENTIONAL LAGOON SEASONAL
:
:
DESIGN CAPACITY : 1.60 (1000 M3)

REGION : SOUTHEAST
DISTRICT : PRESCOTT AND RUSSELL
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE :
MINOR BASIN : OTTAWA RIVER
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 3,500

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.76	0.78	0.93	0.97	1.15	0.88	0.85	0.99	0.94	1.10	0.94	1.10	0.95	
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BOD5														
INFLUENT (MG/L)	300.0	190.0	135.0	180.0	130.0	105.0	190.0	90.0	165.0	210.0	165.0	165.0	168.8	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
SUSPENDED SOLIDS														
INFLUENT (MG/L)	600.0	405.0	213.0	113.0	305.0	136.0	196.0	136.0	135.0	123.0	135.0	220.0	226.4	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	22.7	14.1	8.5	8.6	7.2	9.9	9.6	8.7	7.8	9.6	7.8	9.2	10.3	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	NO DISCHARGE
SS	40.0 MG/L	NO DISCHARGE
TP	NA	NO DISCHARGE

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : RUSSELL
PLANT : RUSSELL LAGOON
WORKS NUMBER : 110001514
TREATMENT : CONVENTIONAL LAGOON ANNUAL
:
:
DESIGN CAPACITY : 1.00 (1000 M3)

REGION : SOUTHEAST
DISTRICT : PRESCOTT AND RUSSELL
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : CASTOR RIVER
MINOR BASIN : OTTAWA RIVER
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 1,400

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.28	0.30	0.38	0.32	0.38	0.29	0.27	0.34	0.31	0.37	0.53	0.39	0.35	
LAGOON DISCHARGE	ND	ND	ND	ND	109.00	ND	ND	ND	ND	ND	ND	ND	109.00	
BOD5														
INFLUENT (MG/L)	77.0	242.0	188.0	126.0	50.0	70.0	91.0	98.0	105.0	146.0	74.0	149.0	118.0	
EFFLUENT (MG/L)	ND	ND	ND	ND	16.3	ND	ND	ND	ND	ND	ND	ND	16.3	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	ND	6.19	ND	ND	ND	ND	ND	ND	ND	5.71	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	67.0	550.0	350.0	246.0	56.0	108.0	76.0	140.0	68.0	266.0	92.0	61.0	173.3	
EFFLUENT (MG/L)	ND	ND	ND	ND	72.3	ND	ND	ND	ND	ND	ND	ND	72.3*	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	ND	27.47	ND	ND	ND	ND	ND	ND	ND	25.31	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	8.6	14.1	7.7	10.4	5.8	7.0	8.3	8.0	7.2	8.0	5.6	7.5	8.2	
EFFLUENT (MG/L)	ND	ND	ND	ND	0.8	ND	ND	ND	ND	ND	ND	ND	0.8	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	0.30	ND	ND	ND	ND	ND	ND	ND	0.28	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	NO
TP	1.0 MG/L	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : SIDNEY
PLANT : BATAWA WPCP
WORKS NUMBER : 110000668
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL-CONTINUOUS
:
DESIGN CAPACITY : 0.56 (1000 M3)

REGION : SOUTHEAST
DISTRICT : HASTINGS
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : TRENT RIVER
MINOR BASIN : ONTARIO
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 300

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.53	0.51	0.42	0.58	0.57	0.29	0.21	0.21	0.19	0.28	0.77	0.30	0.41	
BOD5														
INFLUENT (MG/L)	124.0	177.0	62.0	53.0	90.0	69.0	148.0	178.0	72.0	126.0	99.0	76.0	106.2	
EFFLUENT (MG/L)	6.6	8.3	7.0	5.0	3.0	4.5	3.0	3.1	2.2	4.3	8.0	1.0	4.7	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	3.49	4.23	2.94	2.90	1.71	1.30	0.63	0.65	0.41	1.20	6.16	0.30	1.93	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	55.0	73.0	55.0	78.0	60.0	74.0	122.0	71.0	120.0	81.0	65.0	88.0	78.5	
EFFLUENT (MG/L)	18.0	13.0	21.6	21.0	11.0	13.0	8.0	7.6	6.2	8.5	14.0	9.8	12.6	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	9.54	6.63	9.07	12.18	6.27	3.77	1.68	1.59	1.17	2.38	10.78	2.94	5.17	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	4.1	4.1	5.7	2.9	6.8	4.9	4.0	3.8	2.5	4.0	4.0	1.6	4.0	
EFFLUENT (MG/L)	1.0	0.6	9.4*	1.7*	0.7	0.7	0.5	0.4	0.2	0.4	0.5	0.4	1.4	2
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	0.53	0.30	3.94	0.98	0.39	0.20	0.10	0.08	0.03	0.11	0.38	0.12	0.57	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	NO

NO REMEDIAL MEASURES REPORTED

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : SMITHS FALLS
PLANT : SMITHS FALLS WPCP
WORKS NUMBER : 120000890
TREATMENT : PRIMARY
: PHOSPHORUS REMOVAL CONTINUOUS
:
DESIGN CAPACITY : 11.36 (1000 M3)

REGION : SOUTHEAST
DISTRICT : LANARK
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : RIDEAU RIVER
MINOR BASIN : OTTAWA RIVER
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 11,000

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	9.09	8.56	10.73	12.54	14.61	13.76	10.87	7.82	7.80	8.54	11.13	8.25	10.31	
BOD5														
INFLUENT (MG/L)	139.0	98.0	115.0	86.0	198.0	95.0	124.0	81.0	90.0	85.0	135.0	440.0	140.5	
EFFLUENT (MG/L)	141.0	29.0	16.0	13.0	29.5	16.0	8.0	11.5	17.0	38.0	11.5	26.0	29.7	
LOADING (KG/D)	1281.69	248.24	171.68	163.02	430.99	220.16	86.96	89.93	132.60	324.52	127.99	214.50	306.21	
PERCENT REMOVAL	ND	70	86	85	85	83	94	86	81	55	91	94	79	
PERCENT REMOVAL LIMITS													50	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	205.0	107.0	111.0	76.0	105.0	243.0	89.0	105.0	105.0	129.0	294.0	169.0	144.8	
EFFLUENT (MG/L)	57.0	28.0	19.0	22.0	29.5	22.5	23.5	40.0	30.0	36.0	24.5	23.0	29.6	
LOADING (KG/D)	518.13	239.68	203.87	275.88	430.99	309.60	255.44	312.80	234.00	307.44	272.68	189.75	305.18	
PERCENT REMOVAL	72	74	83	71	72	91	74	62	71	72	92	86	80	
PERCENT REMOVAL LIMITS													70	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	4.5	5.0	5.5	3.6	3.2	4.4	3.6	5.8	4.0	4.8	6.6	5.7	4.7	
EFFLUENT (MG/L)	1.7*	0.4	0.6	0.4	0.5	0.6	1.0	2.0*	1.2*	0.7	0.9	0.5	0.9	3
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	15.45	3.42	6.43	5.01	7.30	8.25	10.87	15.64	9.36	5.97	10.01	4.12	9.28	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	50%	YES
SS	70%	YES
TP	1.0 MG/L	NO

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES	START DATE	END DATE	ANTICIPATED COMPLIANCE
FACILITY EXPANSION/UPGRADING - ENVIRONMENTAL ASSESSMENT BEING CONDUCTED	1988	1990	1993

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : ST ISIDORE DE PRESCOTT
PLANT : ST.ISIDORE LAGOON
WORKS NUMBER : 110002210
TREATMENT : CONVENTIONAL LAGOON ANNUAL
:
:
DESIGN CAPACITY : 0.65 (1000 M3)

REGION : SOUTHEAST
DISTRICT : PRESCOTT AND RUSSELL
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : SCOTCH RIVER
MINOR BASIN : OTTAWA RIVER
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 772

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.24	0.23	0.27	0.29	0.31	0.34	0.40	0.40	0.39	0.39	0.48	0.40	0.35	
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BOD5														
INFLUENT (MG/L)	190.0	248.0	101.0	134.0	99.0	95.0	127.0	225.0	162.0	155.0	165.0	238.0	161.6	
EFFLUENT (MG/L)	ND	ND	ND	ND	7.0	ND	ND	ND	ND	ND	ND	ND	7.0	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	ND	2.17	ND	ND	ND	ND	ND	ND	ND	2.45	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	141.0	206.0	99.0	125.0	125.0	92.0	78.0	307.0	135.0	159.0	120.0	189.0	148.0	
EFFLUENT (MG/L)	ND	ND	ND	ND	296.7	ND	ND	ND	ND	ND	ND	ND	296.7*	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	ND	91.97	ND	ND	ND	ND	ND	ND	ND	103.85	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	11.1	14.0	8.9	9.8	7.6	7.6	6.7	11.2	9.0	9.1	8.0	11.9	9.6	
EFFLUENT (MG/L)	ND	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND	1.6	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	0.49	ND	ND	ND	ND	ND	ND	ND	0.56	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	NO
TP	NA	NA

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES	START DATE	END DATE	ANTICIPATED COMPLIANCE
OPERATIONAL/PROCESS - PHOSPHORUS REMOVAL BEING UPGRADED			1990

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : STIRLING
PLANT : STIRLING LAGOON
WORKS NUMBER : 110000686
TREATMENT : CONVENTIONAL LAGOON SEASONAL
: PHOSPHORUS REMOVAL - BATCH
:
DESIGN CAPACITY : 1.13 (1000 M3)

REGION : SOUTHEAST
DISTRICT : HASTINGS
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : RAWDON CREEK
MINOR BASIN : ONTARIO
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 1,700

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	9.84	0.75	1.04	0.93	0.94	0.96	0.86	0.94	1.03	0.87	1.08	1.08	1.69	
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	7460.00	ND	ND	ND	7460.00	
BOD5														
INFLUENT (MG/L)	660.0	720.0	300.0	100.0	45.0	230.0	46.0	24.0	40.0	ND	10.0	1,200.0	306.8	
EFFLUENT (MG/L)	ND	ND	ND	18.0	2.0	ND	ND	ND	9.0	ND	ND	ND	9.7	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	16.74	1.88	ND	ND	ND	9.27	ND	ND	ND	16.39	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	344.0	757.0	370.0	107.0	39.0	370.0	85.0	60.0	88.0	ND	11.0	1,580.0	346.5	
EFFLUENT (MG/L)	ND	ND	ND	76.0	27.0	ND	ND	ND	27.0	ND	ND	ND	43.3*	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	70.68	25.38	ND	ND	ND	27.81	ND	ND	ND	73.18	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	16.4	15.6	15.3	7.0	5.6	15.3	4.9	3.4	7.1	ND	1.8	76.5	15.4	
EFFLUENT (MG/L)	ND	ND	ND	1.7*	0.3	ND	ND	ND	1.0	ND	ND	ND	1.0	1
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	1.58	0.28	ND	ND	ND	1.03	ND	ND	ND	1.69	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	NO
TP	1.0 MG/L	NO

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES	START DATE	END DATE	ANTICIPATED COMPLIANCE
COLLECTION SYSTEM - INFILTRATION PROBLEMS BEING CORRECTED	1990/06	1990/12	1990
FACILITY EXPANSION/UPGRADING - FINAL DESIGN PHASE	1990/06	1990/12	1990

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : TRENTON
PLANT : TRENTON WPCP
WORKS NUMBER : 110000775
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL-CONTINUOUS
:
DESIGN CAPACITY : 15.91 (1000 M3)

REGION : SOUTHEAST
DISTRICT : HASTINGS
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : BAY OF QUINTE
MINOR BASIN : ONTARIO
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 15,346

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	13.50	10.31	11.01	12.87	12.94	12.03	8.62	9.25	9.92	11.03	15.09	9.94	11.38	
BOD5														
INFLUENT (MG/L)	317.0	289.0	202.0	170.0	341.0	237.0	258.0	276.0	166.0	204.0	196.0	185.0	236.8	
EFFLUENT (MG/L)	20.5	24.0	14.0	11.8	15.2	10.4	6.0	7.0	5.9	7.3	10.5	15.3	12.3	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	276.75	247.44	154.14	151.86	196.68	125.11	51.72	64.75	58.52	80.51	158.44	152.08	139.97	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	142.0	155.0	160.0	86.0	106.0	135.0	112.0	104.0	116.0	114.0	115.0	119.0	122.0	
EFFLUENT (MG/L)	24.7	35.6	24.9	22.3	20.9	18.3	14.0	14.6	14.0	14.1	15.0	14.2	19.4	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	333.45	367.03	274.14	287.00	270.44	220.14	120.68	135.05	138.88	155.52	226.35	141.14	220.77	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	8.8	6.9	8.1	6.0	7.2	6.0	5.3	5.6	7.0	6.8	5.8	5.7	6.6	
EFFLUENT (MG/L)	0.7	0.4	0.4	0.6	0.5	0.5	0.6	0.6	0.5	0.4	0.7	0.5	0.5	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	9.45	4.12	4.40	7.72	6.47	6.01	5.17	5.55	4.96	4.41	10.56	4.97	5.69	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NO REMEDIAL MEASURES REPORTED

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : TWEED
PLANT : TWEED LAGOON
WORKS NUMBER : 1200000952
TREATMENT : CONVENTIONAL LAGOON SEASONAL
: PHOSPHORUS REMOVAL CONTINUOUS
:
DESIGN CAPACITY : 1.20 (1000 M3)

REGION : SOUTHEAST
DISTRICT : HASTINGS
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : MOIRA RIVER
MINOR BASIN : ONTARIO
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 1,607

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.06	1.26	1.13	2.16	1.47	1.29	0.92	0.69	0.76	1.01	1.75	1.33	1.24	
LAGOON DISCHARGE	ND	ND	ND	85.12	150.86	ND	ND	ND	ND	ND	ND	ND	117.99	
BOD5														
INFLUENT (MG/L)	98.0	92.0	86.0	70.0	71.0	54.0	ND	107.0	173.0	79.0	88.0	83.0	91.0	
EFFLUENT (MG/L)	ND	ND	ND	15.8	5.6	ND	ND	ND	ND	ND	10.0	ND	10.5	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	34.12	8.23	ND	ND	ND	ND	ND	17.50	ND	13.02	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	114.0	93.0	99.0	86.0	74.0	66.0	107.0	121.0	265.0	83.0	134.0	ND	112.9	
EFFLUENT (MG/L)	ND	ND	ND	30.8	12.4	ND	ND	ND	ND	ND	17.0	ND	20.1	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	66.52	18.22	ND	ND	ND	ND	ND	29.75	ND	24.92	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	4.8	3.8	15.6	3.2	3.6	3.6	7.1	7.4	7.2	3.9	3.1	4.3	5.6	
EFFLUENT (MG/L)	ND	ND	ND	1.2*	0.3	ND	ND	ND	ND	ND	0.2	ND	0.6	1
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	2.59	0.44	ND	ND	ND	ND	ND	0.35	ND	0.74	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	1.0 MG/L	NO

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES

	START DATE	END DATE	ANTICIPATED COMPLIANCE
COLLECTION SYSTEM - COLLECTION SYSTEM UNDER REVIEW			1990
NO ACTION - MARGINAL FAILURE-MONITORING LEVEL OF FAILED PARAMETER CLOSELY			1990

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : VANKLEEK HILL
PLANT : VANKLEEK HILL LAGOON
WORKS NUMBER : 110001658
TREATMENT : CONVENTIONAL LAGOON SEASONAL
:
:
DESIGN CAPACITY : 0.90 (1000 M3)

REGION : SOUTHEAST
DISTRICT : PRESCOTT AND RUSSELL
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : LITTLE RIDEAU CREEK
MINOR BASIN : OTTAWA RIVER
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 1,711

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.82	0.78	1.24	1.17	0.90	0.91	0.71	0.83	0.76	0.82	1.29	0.92	0.93	
LAGOON DISCHARGE	ND	ND	ND	37.63	21.08	ND	ND	ND	ND	ND	19.68	9.96	22.09	
BOD5														
INFLUENT (MG/L)	ND	48.0	68.0	18.0	36.0	26.0	80.0	53.0	58.0	75.0	59.0	79.0	54.5	
EFFLUENT (MG/L)	ND	ND	ND	27.0	10.7	ND	ND	ND	ND	ND	2.0	18.7	14.6	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	31.59	9.63	ND	ND	ND	ND	ND	2.58	17.20	13.58	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	72.0	78.0	53.0	45.0	85.0	52.0	146.0	49.0	71.0	67.0	106.0	92.0	76.3	
EFFLUENT (MG/L)	ND	ND	ND	6.1	23.2	ND	ND	ND	ND	ND	27.0	19.7	19.0	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	7.13	20.88	ND	ND	ND	ND	ND	34.83	18.12	17.67	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	3.4	5.0	5.9	2.1	3.4	2.9	5.6	3.5	3.8	4.8	3.8	3.9	4.0	
EFFLUENT (MG/L)	ND	ND	ND	1.7	1.3	ND	ND	ND	ND	ND	0.3	3.5	1.7	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	1.98	1.17	ND	ND	ND	ND	ND	0.38	3.22	1.58	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	NA	NA

NO REMEDIAL MEASURES REPORTED

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : WELLINGTON
PLANT : WELLINGTON WPCP
WORKS NUMBER : 170003165
TREATMENT : EXTENDED AERATION
: PHOSPHORUS REMOVAL CONTINUOUS
:
DESIGN CAPACITY : 1.50 (1000 M3)

REGION : SOUTHEAST
DISTRICT : PRINCE EDWARD
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : LAKE ONTARIO
MINOR BASIN : ONTARIO
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 1,077

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.42	0.42	0.59	0.94	0.74	0.60	0.42	0.37	0.34	0.40	0.64	0.54	0.54	
BOD5														
INFLUENT (MG/L)	135.0	145.0	108.0	42.0	72.0	70.0	255.0	112.0	255.0	215.0	130.0	88.0	135.6	
EFFLUENT (MG/L)	1.0	3.0	8.0	4.0	2.0	4.0	2.0	3.0	2.0	1.6	2.0	2.0	2.9	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	0.42	1.26	4.72	3.76	1.48	2.40	0.84	1.11	0.68	0.64	1.28	1.08	1.57	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	100.0	106.0	125.0	128.0	59.0	68.0	266.0	136.0	185.0	122.0	78.0	68.0	120.1	
EFFLUENT (MG/L)	3.0	9.0	21.0	18.0	9.0	2.0	4.0	11.0	4.0	7.8	5.0	11.0	8.7	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	1.26	3.78	12.39	16.92	6.66	1.20	1.68	4.07	1.36	3.12	3.20	5.94	4.70	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	15.1	6.1	7.1	2.6	5.4	8.9	11.4	9.6	16.7	9.1	7.4	5.4	8.7	
EFFLUENT (MG/L)	1.2*	0.8	1.8*	0.5	0.9	0.5	0.5	0.7	0.7	0.6	0.7	0.7	0.8	2
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	0.50	0.33	1.06	0.47	0.66	0.30	0.21	0.25	0.23	0.24	0.44	0.37	0.43	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	NO

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES

	START DATE	END DATE	ANTICIPATED COMPLIANCE
OPERATIONAL/PROCESS - OPERATIONAL PROCEDURES BEING UPGRADED	1989	1989/06	1990
OPERATIONAL/PROCESS - MONITORING PROCEDURES BEING UPGRADED	1989	1989/06	1990

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : WESTPORT
PLANT : WESTPORT LAGOON
WORKS NUMBER : 110001550
TREATMENT : CONVENTIONAL LAGOON SEASONAL
: PHOSPHORUS REMOVAL - BATCH
:
DESIGN CAPACITY : 0.24 (1000 M3)

REGION : SOUTHEAST
DISTRICT : LEEDS AND GRENVILLE
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : UPPER RIDEAU LAKE
MINOR BASIN : OTTAWA RIVER
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 566

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.24	0.23	0.25	0.30	0.34	0.32	0.28	0.26	0.24	0.26	0.31	0.26	0.27	
LAGOON DISCHARGE	ND	ND	ND	ND	52.46	ND	ND	ND	ND	ND	47.68	ND	50.07	
BOD5														
INFLUENT (MG/L)	79.0	141.0	116.0	85.0	99.0	73.0	94.0	137.0	120.0	133.0	73.0	58.0	100.7	
EFFLUENT (MG/L)	ND	ND	ND	14.7	10.0	ND	ND	ND	ND	ND	9.4	ND	11.4	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	4.41	3.40	ND	ND	ND	ND	ND	2.91	ND	3.08	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	108.0	190.0	241.0	85.0	127.0	87.0	89.0	115.0	82.0	115.0	80.0	46.0	113.8	
EFFLUENT (MG/L)	ND	ND	ND	28.0	15.7	ND	ND	ND	ND	ND	15.4	ND	19.7	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	8.40	5.33	ND	ND	ND	ND	ND	4.77	ND	5.32	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	5.1	7.3	6.3	4.8	8.7	6.0	4.9	7.3	6.1	6.7	5.6	4.4	6.1	
EFFLUENT (MG/L)	ND	ND	ND	1.7*	0.3	ND	ND	ND	ND	ND	0.6	ND	0.9	1
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	0.51	0.10	ND	ND	ND	ND	ND	0.18	ND	0.24	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	NO

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES

	START DATE	END DATE	ANTICIPATED COMPLIANCE
FACILITY EXPANSION/UPGRADING - ENGINEERING STUDY PHASE			

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : WILLIAMSBURG TWP
PLANT : WILLIAMSBURG PV LAGOON
WORKS NUMBER : 120002013
TREATMENT : CONVENTIONAL LAGOON ANNUAL
:
:
DESIGN CAPACITY : 1.22 (1000 M3)

REGION : SOUTHEAST
DISTRICT : STORMONT, DUNDAS AND GLENGARRY
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : MCMARTIN DRAIN
MINOR BASIN : OTTAWA RIVER
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 300

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.30	0.36	0.38	0.49	0.56	0.65	0.45	0.35	0.31	0.41	0.63	0.44	0.44	
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BOD5														
INFLUENT (MG/L)	180.0	88.0	230.0	60.0	102.0	68.0	65.0	84.0	135.0	145.0	90.0	66.0	109.4	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
SUSPENDED SOLIDS														
INFLUENT (MG/L)	124.0	85.0	113.0	77.0	115.0	76.0	66.0	82.0	77.0	84.0	51.0	48.0	83.2	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	7.9	8.0	7.1	5.6	5.7	3.9	5.7	6.6	6.2	8.9	5.2	3.3	6.2	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	NO DISCHARGE
SS	40.0 MG/L	NO DISCHARGE
TP	NA	NO DISCHARGE

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : WINCHESTER
PLANT : WINCHESTER LAGOON
WORKS NUMBER : 110001202
TREATMENT : CONVENTIONAL LAGOON SEASONAL
:
:
DESIGN CAPACITY : 1.72 (1000 M3)

REGION : SOUTHEAST
DISTRICT : STORMONT, DUNDAS AND GLENGARRY
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : CASTOR RIVER
MINOR BASIN : OTTAWA RIVER
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 2,200

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.03	1.01	1.18	1.48	1.75	1.66	1.43	1.63	1.07	1.22	1.69	1.11	1.36	
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BOD5														
INFLUENT (MG/L)	210.0	160.0	157.0	123.0	114.5	44.0	61.0	97.0	75.0	56.0	66.0	83.0	103.9	
EFFLUENT (MG/L)	ND	ND	ND	34.3	ND	ND	ND	ND	ND	ND	0.8	ND	17.6	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	50.76	ND	ND	ND	ND	ND	ND	1.35	ND	23.94	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	226.0	155.0	168.0	920.0	867.5	81.0	106.0	118.0	71.0	40.0	78.0	56.0	240.5	
EFFLUENT (MG/L)	ND	ND	ND	24.0	ND	ND	ND	ND	ND	ND	14.0	ND	19.0	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	35.52	ND	ND	ND	ND	ND	ND	23.66	ND	25.84	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	8.8	7.7	9.1	8.0	7.4	ND	5.9	7.2	6.0	6.8	4.9	6.1	7.1	
EFFLUENT (MG/L)	ND	ND	ND	5.6	ND	ND	ND	ND	ND	ND	0.8	ND	3.2	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	8.28	ND	ND	ND	ND	ND	ND	1.35	ND	4.35	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	NA	NA

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

Northeastern Region
5

Ministry of the Environment
Ontario

Northeastern Region 5

Ministry of the Environment
Ontario

REGIONAL OFFICE

Sudbury
199 Larch St.
P3E 5P9
(705) 675-4501

DISTRICT OFFICES

North Bay
1500 Fisher St.
P1B 2H3
(705) 476-1001

Sault Ste. Marie
445 Albert St. East
P6A 2J9
(705) 949-4640

Sudbury
199 Larch St.
P3E 5P9
(705) 675-4501

Timmins
83 Algonquin Blvd. West
P4N 2R4
(705) 268-3222

SUB-OFFICE

Parry Sound
74 Church St.
P2A 1Z1
(705) 746-2139

NORTHEAST SUMMARY - 1989

Treatment Type	Number			Design Capacity (1000M3/D)		
	Min	Mun	Tot	Ministry	Municipal	Total
Primary	2	1	3	57.55	34.09	91.64
Conventional Activated Sludge	4	4	8	65.69	25.44	91.13
Contact Stabilization	3	1	4	18.24	6.82	25.06
Extended Aeration	10	7	17	20.43	18.95	39.38
Trickling Filter	0	1	1	-	0.91	0.91
High Rate	0	1	1	-	68.19	68.19
Oxidation Ditch	0	1	1	-	3.00	3.00
Communal Septic Tank	0	1	1			
Aerated Lagoon	1	0	1	4.55	-	4.55
Convent. Lagoon Continuous	4	2	6	1.23	-	1.23
Conventional Lagoon Seasonal	23	9	32	14.42	57.31	71.73
Aerated Cell Plus Lagoon	2	1	3	12.32	0.39	12.71
Exfiltration Lagoon	2	2	4	1.68	1.54	3.23
TOTALS	51	31	82	196.11	216.64	412.75

1000M3/D: Thousands of cubic meters per day
ADF: Average Daily Flow

NORTHEAST SUMMARY - 1989

Treatment Type	Number			Annual ADF (1000M3/D)		
	Min	Mun	Tot	Ministry	Municipal	Total
Primary	2	1	3	35.60	20.36	55.96
Conventional Activated Sludge	4	4	8	49.27	15.22	64.49
Contact Stabilization	3	1	4	15.61	4.07	19.68
Extended Aeration	10	7	17	28.64	15.79	44.43
Trickling Filter	0	1	1	0.00	0.77	0.77
High Rate	0	1	1	0.00	60.42	60.42
Oxidation Ditch	0	1	1	0.00	1.59	1.59
Communal Septic Tank	0	1	1	0.00	0.00	0.00
Aerated Lagoon	1	0	1	2.90	0.00	2.90
Convent. Lagoon Continuous	4	2	6	1.93	0.00	1.93
Conventional Lagoon Seasonal	23	9	32	13.43	3.01	16.44
Aerated Cell Plus Lagoon	2	1	3	6.87	0.26	7.13
Exfiltration Lagoon	2	2	4	1.79	3.06	4.85
TOTALS	51	31	32	156.04	124.55	280.59

1000M3/D: Thousands of cubic meters per day
ADF: Average Daily Flow

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : ARMSTRONG
PLANT : BARLTON LAGOON
WORKS NUMBER : 120100042
TREATMENT : CONVENTIONAL LAGOON CONTINUOUS
:
:
DESIGN CAPACITY : 0.36 (1000 M3)

REGION : NORTHEAST
DISTRICT : TIMISKAMING
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : EVANTUREL CREEK
MINOR BASIN : OTTAWA RIVER
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 1,452

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	16.00	ND	ND	ND	16.00	
BOD5														
INFLUENT (MG/L)	ND	121.0	ND	ND	58.0	120.0	145.0	160.0	145.0	ND	205.0	95.0	131.1	
EFFLUENT (MG/L)	ND	30.0	ND	ND	32.0	16.0	16.0	28.0	12.0	ND	12.0	24.0	21.3	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
SUSPENDED SOLIDS														
INFLUENT (MG/L)	ND	140.0	ND	ND	80.0	110.0	50.0	140.0	50.0	ND	25.0	130.0	90.6	
EFFLUENT (MG/L)	ND	20.0	ND	ND	40.0	10.0	30.0	30.0	7.2	ND	20.1	40.0	24.7	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	ND	7.6	ND	ND	7.4	7.2	7.2	7.4	7.2	ND	7.1	760.0	101.4	
EFFLUENT (MG/L)	ND	7.0	ND	ND	7.2	7.1	7.2	8.5	7.3	ND	8.0	7.3	7.5	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	INSUFFICIENT DATA
SS	40.0 MG/L	INSUFFICIENT DATA
TP	NA	INSUFFICIENT DATA

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : ASSIGINACK
PLANT : MANITOWANING LAGOON
WORKS NUMBER : 110001408
TREATMENT : CONVENTIONAL LAGOON SEASONAL
:
:
DESIGN CAPACITY : 0.25 (1000 M3)

REGION : NORTHEAST
DISTRICT : MANITOULIN
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : LAKE HURON
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 440

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.28	0.25	0.42	0.42	0.23	0.21	0.24	0.23	0.18	0.18	0.25	0.19	0.26	
LAGOON DISCHARGE	ND	ND	ND	28.33	ND	ND	ND	ND	ND	ND	27.28	ND	27.81	
BOD5														
INFLUENT (MG/L)	165.0	78.0	210.0	45.0	18.0	42.0	64.0	7.0	46.0	32.0	34.0	160.0	75.1	
EFFLUENT (MG/L)	ND	ND	ND	15.2	ND	ND	ND	ND	ND	ND	18.9	ND	17.1	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	6.38	ND	ND	ND	ND	ND	ND	4.72	ND	4.45	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	120.0	75.0	200.0	65.0	25.0	80.0	35.0	20.0	30.0	25.0	30.0	200.0	75.4	
EFFLUENT (MG/L)	ND	ND	ND	40.4	ND	ND	ND	ND	ND	ND	26.0	ND	33.2	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	16.96	ND	ND	ND	ND	ND	ND	6.50	ND	8.63	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	4.0	4.2	7.6	2.5	1.5	1.7	4.0	1.4	2.9	2.7	2.8	10.4	3.8	
EFFLUENT (MG/L)	ND	ND	ND	2.8	ND	ND	ND	ND	ND	ND	2.2	ND	2.5	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	1.17	ND	ND	ND	ND	ND	ND	0.55	ND	0.65	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	NA	NA

NO REMEDIAL MEASURES REPORTED

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : BLACK RIVER MATHESON
PLANT : MATHESON WPCP
WORKS NUMBER : 1100000025
TREATMENT : EXTENDED AERATION
:
:
DESIGN CAPACITY : 1.04 (1000 M3)

REGION : NORTHEAST
DISTRICT : COCHRANE
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : BLACK RIVER
MINOR BASIN : JAMES BAY
MAJOR BASIN : ARCTIC WATERSHED
POPULATION SERVED : 920

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.35	0.36	0.51	1.03	0.91	0.63	0.45	0.52	0.41	0.51	0.60	0.35	0.55	
BOD5														
INFLUENT (MG/L)	95.0	145.0	66.0	60.0	44.0	47.0	77.0	61.3	66.5	65.0	74.0	124.0	77.1	
EFFLUENT (MG/L)	5.7	8.0	7.7	3.9	6.7	12.7	3.4	5.1	9.8	10.6	4.1	6.0	7.0	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	1.99	2.88	3.92	4.01	6.09	8.00	1.53	2.65	4.01	5.40	2.46	2.10	3.85	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	110.0	155.0	75.0	90.0	78.0	69.0	48.5	53.3	50.0	93.0	93.0	120.0	86.2	
EFFLUENT (MG/L)	9.5	7.0	5.5	5.5	4.0	4.2	5.3	4.7	6.0	8.5	8.5	9.5	6.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	3.32	2.52	2.80	5.66	3.64	2.64	2.38	2.44	2.46	4.33	5.10	3.32	3.58	
TOTAL PHOSPHORUS														
INFLUENT (MG/L)	5.6	5.5	4.6	4.1	2.7	4.4	5.4	4.6	3.3	4.1	3.3	5.0	4.4	
EFFLUENT (MG/L)	2.7	3.2	1.9	1.2	1.5	1.8	2.1	2.1	2.3	2.1	1.5	2.2	2.1	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	0.94	1.15	0.96	1.23	1.36	1.13	0.94	1.09	0.94	1.07	0.90	0.77	1.16	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	NA	NA

NO REMEDIAL MEASURES REPORTED

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : BLACK RIVER MATHESON
PLANT : RAMORE LAGOON
WORKS NUMBER : 110001104
TREATMENT : CONVENTIONAL LAGOON CONTINUOUS
:
:
DESIGN CAPACITY : 0.12 (1000 M3)

REGION : NORTHEAST
DISTRICT : COCHRANE
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : BLACK RIVER
MINOR BASIN : JAMES BAY
MAJOR BASIN : ARCTIC WATERSHED
POPULATION SERVED : 320

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.10	0.09	0.11	0.25	0.22	0.16	0.14	0.18	0.10	0.14	0.15	0.10	0.15	
LAGOON DISCHARGE	3.06	2.59	3.31	27.25	0.69	ND	ND		0.21	0.34	ND	1.51	4.33	
BOD5														
INFLUENT (MG/L)	127.5	270.0	53.0	69.0	46.0	123.0	89.0	109.3	95.0	65.0	51.0	149.0	103.9	
EFFLUENT (MG/L)	18.0	22.0	23.0	14.5	ND	ND	12.8	9.7	20.0	ND	ND	40.0	20.0	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	1.80	1.98	2.53	3.62	ND	ND	1.79	1.74	2.00	ND	ND	4.00	3.00	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	162.5	390.0	80.0	65.0	70.0	101.0	54.0	75.0	90.0	88.0	78.0	115.0	114.0	
EFFLUENT (MG/L)	7.0	8.5	15.0	16.8	ND	ND	29.0	18.3	37.5	ND	ND	30.0	20.3	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	0.70	0.76	1.65	4.20	ND	ND	4.06	3.29	3.75	ND	ND	3.00	3.05	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.5	12.8	8.9	3.3	3.0	5.1	5.5	5.7	9.3	3.8	5.1	6.6	6.3	
EFFLUENT (MG/L)	3.9	4.5	4.0	2.7	ND	ND	1.6	1.6	1.7	ND	ND	3.0	2.9	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	0.39	0.40	0.44	0.67	ND	ND	0.22	0.28	0.17	ND	ND	0.30	0.44	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	INSUFFICIENT DATA
SS	40.0 MG/L	INSUFFICIENT DATA
TP	NA	INSUFFICIENT DATA

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES	START DATE	END DATE	ANTICIPATED COMPLIANCE
FACILITY EXPANSION/UPGRADING - CONSTRUCTION INITIATED	1989/07		

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : BLACK RIVER MATHESON
PLANT : VAL GAGNE LAGOON
WORKS NUMBER : 1200001559
TREATMENT : CONVENTIONAL LAGOON CONTINUOUS
: SUMMER STORAGE
:
DESIGN CAPACITY : 0.12 (1000 M3)

REGION : NORTHEAST
DISTRICT : COCHRANE
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : CREEK TO BLACK RIVER
MINOR BASIN : JAMES BAY
MAJOR BASIN : ARCTIC WATERSHED
POPULATION SERVED : 300

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND	ND		
LAGOON DISCHARGE	ND	ND	ND	19.72	ND	ND	ND	ND	ND	ND	ND	ND	19.72	
BOD5														
INFLUENT (MG/L)	129.5	178.0	68.0	54.0	62.0	116.0	58.0	68.7	72.0	60.0	57.0	207.0	94.2	
EFFLUENT (MG/L)	26.0	42.5	25.5	11.3	ND	ND	ND	ND	ND	ND	ND	ND	26.3	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
SUSPENDED SOLIDS														
INFLUENT (MG/L)	145.0	190.0	120.0	75.0	100.0	96.0	72.0	65.0	60.0	88.0	110.0	228.0	112.4	
EFFLUENT (MG/L)	10.0	9.5	9.5	23.8	ND	ND	ND	ND	ND	ND	ND	ND	13.2	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	5.9	5.4	5.5	3.2	3.6	4.3	4.6	5.6	5.4	3.4	3.6	5.3	4.7	
EFFLUENT (MG/L)	3.9	4.6	4.0	1.4	ND	ND	ND	ND	ND	ND	ND	ND	3.5	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	NA	NA

NO REMEDIAL MEASURES REPORTED

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : BLIND RIVER
PLANT : BLIND RIVER WPCP
WORKS NUMBER : 110002416
TREATMENT : EXTENDED AERATION
:
:
DESIGN CAPACITY : 3.50 (1000 M3)

REGION : NORTHEAST
DISTRICT : ALGOMA
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : LAKE HURON
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 3,200

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.63	1.58	2.01	1.94	1.67	2.03	1.61	1.64	1.61	1.47	1.57	1.33	1.67	
BOD5														
INFLUENT (MG/L)	106.0	116.0	94.0	41.0	ND	32.0	57.0	62.0	51.0	76.0	80.0	106.0	74.6	
EFFLUENT (MG/L)	1.2	2.7	1.9	4.0	ND	4.5	3.2	2.7	2.0	1.4	1.5	5.0	2.7	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	1.95	4.26	3.81	7.76	ND	9.13	5.15	4.42	3.22	2.05	2.35	6.65	4.51	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	109.0	100.0	114.0	56.0	116.0	181.0	62.0	44.0	105.0	109.0	127.0	295.0	118.2	
EFFLUENT (MG/L)	8.5	8.9	3.5	6.9	5.0	6.7	5.3	6.3	5.3	5.0	6.9	9.0	6.4	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	13.85	14.06	7.03	13.38	8.35	13.60	8.53	10.33	8.53	7.35	10.83	11.97	10.69	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	5.9	6.2	7.1	2.5	ND	ND	5.3	6.3	4.5	4.6	3.5	5.8	5.2	
EFFLUENT (MG/L)	2.3	2.8	3.2	7.0	ND	2.3	3.5	7.2	3.5	3.5	2.6	3.0	3.7	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	3.74	4.42	6.43	13.58	ND	4.66	5.63	11.80	5.63	5.14	4.08	3.99	6.18	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	NA	NA

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : BRUCE MINES
PLANT : BRUCE MINES LAGOON
WORKS NUMBER : 110001756
TREATMENT : CONVENTIONAL LAGOON SEASONAL
:
:
DESIGN CAPACITY : 0.28 (1000 M3)

REGION : NORTHEAST
DISTRICT : ALGOMA
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : ST.JOSEPH CHL.TO L.HURON
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 525

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.32	0.29	0.32	0.68	0.38	0.36	0.27	0.26	0.25	0.25	0.30	0.26	0.33	
LAGOON DISCHARGE	ND	ND	ND	ND	55.61	ND	ND	ND	ND	ND	41.40	ND	48.51	
BOD5														
INFLUENT (MG/L)	48.0	96.0	72.0	8.0	135.0	70.0	245.0	76.0	70.0	22.0	118.0	ND	87.3	
EFFLUENT (MG/L)	ND	ND	ND	ND	14.0	ND	ND	ND	ND	ND	16.0	ND	15.0	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	ND	5.32	ND	ND	ND	ND	ND	4.80	ND	4.95	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	55.0	60.0	35.0	10.0	120.0	30.0	170.0	40.0	38.0	15.0	180.0	ND	68.5	
EFFLUENT (MG/L)	ND	ND	ND	ND	42.0	ND	ND	ND	ND	ND	5.5	ND	23.8	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	ND	15.96	ND	ND	ND	ND	ND	1.65	ND	7.85	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	2.1	5.6	2.4	1.1	6.8	6.0	8.5	7.9	4.3	1.9	6.2	ND	4.8	
EFFLUENT (MG/L)	ND	ND	ND	ND	2.5	ND	ND	ND	ND	ND	1.5	ND	2.0	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	0.95	ND	ND	ND	ND	ND	0.45	ND	0.66	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	NA	NA

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES

START DATE	END DATE	ANTICIPATED COMPLIANCE
FACILITY EXPANSION/UPGRADING - FINAL DESIGN PHASE		

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : BURK'S FALLS
PLANT : BURKS FALLS LAGOON
WORKS NUMBER : 110001426
TREATMENT : CONVENTIONAL LAGOON SEASONAL
:
:
DESIGN CAPACITY : 0.68 (1000 M3)

REGION : NORTHEAST
DISTRICT : PARRY SOUND
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : MAGNETAWAN RIVER
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 800

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.35	0.33	0.57	0.46	0.43	0.39	0.34	0.32	0.35	0.35	0.36	0.32	0.38	
LAGOON DISCHARGE	ND	ND	ND	64.80	32.40	ND	ND	ND	ND	ND	64.80	ND	54.00	
BOD5														
INFLUENT (MG/L)	91.0	150.0	245.0	45.0	43.0	60.0	75.0	98.0	80.0	89.0	176.0	171.0	110.3	
EFFLUENT (MG/L)	ND	ND	ND	12.0	15.0	ND	ND	ND	ND	ND	2.4	ND	9.8	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	5.52	6.45	ND	ND	ND	ND	ND	0.86	ND	3.72	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	120.0	150.0	470.0	88.0	75.0	90.0	75.0	78.0	73.0	103.0	18.0	102.0	120.2	
EFFLUENT (MG/L)	ND	ND	ND	17.5	15.0	ND	ND	ND	ND	ND	2.6	ND	11.7	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	8.05	6.45	ND	ND	ND	ND	ND	0.93	ND	4.45	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.0	7.1	10.0	4.5	4.0	5.8	6.8	6.0	6.0	6.0	75.0	5.0	11.9	
EFFLUENT (MG/L)	ND	ND	ND	4.0	3.8	ND	ND	ND	ND	ND	0.8	ND	2.9	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	1.84	1.63	ND	ND	ND	ND	ND	0.28	ND	1.10	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	NA	NA

NO REMEDIAL MEASURES REPORTED

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : CALDWELL
PLANT : VERNER LAGOON
WORKS NUMBER : 110001872
TREATMENT : CONVENTIONAL LAGOON SEASONAL
: PHOSPHORUS REMOVAL - BATCH
:
DESIGN CAPACITY : 0.47 (1000 M3)

REGION : NORTHEAST
DISTRICT : NIPPISSING
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : VEUVE RIVER
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 1,116

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.43	0.38	0.56	0.57	0.62	0.56	0.47	0.43	0.38	0.40	0.52	0.44	0.48	
LAGOON DISCHARGE	ND	36.76	ND	6.66	19.28	51.29	14.50	13.28	5.59	36.07	ND	ND	22.93	
BOD5														
INFLUENT (MG/L)	61.0	53.0	101.0	53.0	47.0	73.0	112.0	80.0	146.0	143.0	119.0	93.0	90.1	
EFFLUENT (MG/L)	ND	18.2	ND	19.0	8.5	4.0	3.3	3.9	9.8	5.0	ND	ND	9.0	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	6.91	ND	10.83	5.27	2.24	1.55	1.67	3.72	2.00	ND	ND	4.32	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	105.0	88.0	128.0	135.0	74.0	146.0	75.0	77.5	57.5	125.0	110.0	133.0	104.5	
EFFLUENT (MG/L)	ND	15.2	ND	80.0	13.3	9.3	15.0	7.5	10.5	6.8	ND	ND	19.7	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	5.77	ND	45.60	8.24	5.20	7.05	3.22	3.99	2.72	ND	ND	9.46	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	3.4	3.0	7.4	1.8	5.3	3.7	3.4	6.3	3.3	6.2	4.5	3.9	4.4	
EFFLUENT (MG/L)	ND	1.0	ND	1.0	0.8	0.6	0.5	0.6	0.7	0.5	ND	ND	0.7	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	0.38	ND	0.57	0.49	0.33	0.23	0.25	0.26	0.20	ND	ND	0.34	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : CAPREOL
PLANT : CAPREOL LAGOON
WORKS NUMBER : 120001210
TREATMENT : EXFILTRATION LAGOON
:
:
DESIGN CAPACITY : 1.54 (1000 M3)

REGION : NORTHEAST
DISTRICT : SUDBURY, REG. MUN.
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : NO DISC TO SURFACE WATER
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 3,352

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	3.72	3.23	0.66	3.63	3.75	5.41	ND	2.70	2.85	2.55	2.46	2.67	3.06	
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BOD5														
INFLUENT (MG/L)	ND	ND	ND	ND	120.0	48.0	ND	ND	82.0	122.0	ND	ND	93.0	
EFFLUENT (MG/L)	ND	ND	ND	ND	6.8	22.0	ND	ND	13.0	12.0	14.0	ND	13.6	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	25.50	119.02	ND	ND	37.05	30.60	34.44	ND	41.62	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	ND	ND	ND	ND	95.0	15.0	ND	ND	35.0	170.0	ND	ND	78.8	
EFFLUENT (MG/L)	ND	ND	ND	ND	25.0	70.0	ND	ND	8.0	15.0	20.0	ND	27.6	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	93.75	378.70	ND	ND	22.80	38.25	49.20	ND	84.46	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	ND	ND	ND	ND	5.0	2.2	ND	ND	3.5	6.1	ND	ND	4.2	
EFFLUENT (MG/L)	ND	ND	ND	ND	1.5	2.6	ND	ND	1.6	2.1	2.5	ND	2.1	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	5.62	14.06	ND	ND	4.56	5.35	6.15	ND	6.43	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	NA	NO DIRECT DISCHARGE
SS	NA	NO DIRECT DISCHARGE
TP	NA	NO DIRECT DISCHARGE

NO REMEDIAL MEASURES REPORTED

NOTE:
BOD - HAS NO CRITERIA
SS - HAS NO CRITERIA
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : CASEY
PLANT : BELLE VALLEE LAGOON
WORKS NUMBER : 120001808
TREATMENT : CONVENTIONAL LAGOON SEASONAL
:
:
DESIGN CAPACITY : 0.12 (1000 M3)

REGION : NORTHEAST
DISTRICT : TIMISKAMING
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : BLANCHE RIVER
MINOR BASIN : OTTAWA RIVER
MAJOR BASIN : GREAT LAKES
POPULATION SERVED :

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BOD5														
INFLUENT (MG/L)	470.0	550.0	470.0	480.0	170.0	170.0	200.0	ND	88.0	210.0	170.0	310.0	298.9	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
SUSPENDED SOLIDS														
INFLUENT (MG/L)	65.0	90.0	130.0	95.0	100.0	50.0	40.0	ND	65.0	270.0	85.0	220.0	110.0	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	28.0	16.0	31.5	11.8	12.0	11.3	15.4	ND	5.5	11.8	12.8	30.0	16.9	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	NO DISCHARGE
SS	40.0 MG/L	NO DISCHARGE
TP	NA	NO DISCHARGE

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : CASIMIR J.A.
PLANT : ST.CHARLES LAGOON
WORKS NUMBER : 110002256
TREATMENT : CONVENTIONAL LAGOON SEASONAL
: PHOSPHORUS REMOVAL - BATCH
:
DESIGN CAPACITY : 0.54 (1000 M3)

REGION : NORTHEAST
DISTRICT : SUDBURY DIST.
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : MCPHERSON CREEK W.BRANCH
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 280

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.19	0.12	0.58	0.94	0.45	0.38	0.22	0.20	0.16	0.14	0.15	0.14	0.31	
LAGOON DISCHARGE	ND	ND	ND	51.50	ND	ND	ND	ND	ND	ND	ND	ND	51.50	
BOD5														
INFLUENT (MG/L)	ND	150.0	140.0	35.0	69.0	113.0	177.0	ND	110.0	104.0	94.0	263.0	125.5	
EFFLUENT (MG/L)	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	1.2	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	1.12	ND	ND	ND	ND	ND	ND	ND	ND	0.37	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	ND	120.0	130.0	40.0	62.0	73.0	95.0	ND	62.0	83.0	115.0	160.0	94.0	
EFFLUENT (MG/L)	ND	ND	ND	5.4	ND	ND	ND	ND	ND	ND	ND	ND	5.4	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	5.07	ND	ND	ND	ND	ND	ND	ND	ND	1.67	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	ND	7.6	7.7	2.1	4.1	6.1	7.1	ND	5.8	5.7	4.8	8.7	6.0	
EFFLUENT (MG/L)	ND	ND	ND	1.1*	ND	ND	ND	ND	ND	ND	ND	ND	1.1	1
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	1.03	ND	ND	ND	ND	ND	ND	ND	ND	0.34	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	NO

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES	START DATE	END DATE	ANTICIPATED COMPLIANCE
EQUIPMENT/MAINTENANCE - EXISTING EQUIPMENT BEING REPAIRED	1989/04	1989/04	

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : CHAPLEAU
PLANT : CHAPLEAU LAGOON
WORKS NUMBER : 110002149
TREATMENT : AERATED LAGOON
: CONTINUOUS DISCHARGE
: SERIES OPERATION
DESIGN CAPACITY : 4.54 (1000 M3)

REGION : NORTHEAST
DISTRICT : SUDBURY DIST.
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : NELBSKWASH
MINOR BASIN : JAMES BAY
MAJOR BASIN : ARCTIC WATERSHED
POPULATION SERVED : 2,450

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	2.53	3.22	3.52	3.88	4.26	3.01	2.43	2.28	2.11	2.14	2.45	2.91	2.90	
LAGOON DISCHARGE	78.34	90.02	109.27	116.31	80.84	90.31	75.46	70.77	63.17	66.40	73.59	90.08	83.71	
BOD5														
INFLUENT (MG/L)	32.5	70.0	149.0	39.0	45.0	69.0	52.0	68.0	50.0	135.0	124.0	32.0	72.1	
EFFLUENT (MG/L)	31.5	25.0	9.0	11.2	27.5	18.0	21.0	7.9	18.0	21.0	13.8	22.5	18.9	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	79.69	80.50	31.68	43.45	117.15	54.18	51.03	18.01	37.98	44.94	33.81	65.47	54.81	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	47.5	160.0	167.0	57.0	90.0	125.0	290.0	142.5	58.0	139.0	145.0	30.0	120.9	
EFFLUENT (MG/L)	72.5	15.0	17.5	12.5	37.5	20.0	30.0	22.5	37.5	42.5	22.5	17.5	29.0	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	183.42	48.30	61.60	48.50	159.75	60.20	72.90	51.30	79.12	90.95	55.12	50.92	84.10	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	2.1	2.0	2.8	2.4	1.9	1.6	1.7	1.6	2.5	3.5	2.9	1.7	2.2	
EFFLUENT (MG/L)	1.8	1.3	1.3	0.8	1.1	0.6	0.7	0.7	1.0	1.1	1.3	1.4	1.1	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	4.55	4.18	4.57	3.10	4.68	1.80	1.70	1.59	2.11	2.35	3.18	4.07	3.19	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	NA	NA

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : COCHRANE
PLANT : COCHRANE WPCP
WORKS NUMBER : 120000355
TREATMENT : EXTENDED AERATION
: EFFLUENT POLISHING
:
DESIGN CAPACITY : 3.41 (1000 M3)

REGION : NORTHEAST
DISTRICT : COCHRANE
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : LILLABELLE LAKE
MINOR BASIN : JAMES BAY
MAJOR BASIN : ARCTIC WATERSHED
POPULATION SERVED : 4,600

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	2.66	2.64	2.88	4.07	3.82	2.60	2.74	2.70	2.88	ND	5.27	3.69	3.27	
BOD5														
INFLUENT (MG/L)	ND	92.0	73.0	88.0	48.0	69.0	95.0	ND	ND	89.0	ND	150.0	88.0	
EFFLUENT (MG/L)	ND	80.0	95.5	58.0	47.0	27.8	15.0	ND	ND	33.5	ND	113.0	58.7	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	211.20	275.04	236.06	179.54	72.28	41.10	ND	ND	ND	ND	416.97	191.95	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	ND	130.0	100.0	115.0	85.0	98.0	75.0	ND	ND	205.0	ND	190.0	124.8	
EFFLUENT (MG/L)	ND	360.0	272.5	135.0	95.0	42.5	65.0	ND	ND	102.5	ND	220.0	161.6	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	950.40	784.80	549.45	362.90	110.50	178.10	ND	ND	ND	ND	811.80	528.43	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	ND	4.7	4.1	3.8	3.0	4.6	5.4	ND	ND	5.8	ND	5.8	4.7	
EFFLUENT (MG/L)	ND	7.8	5.3	3.3	1.9	3.1	2.9	ND	ND	6.5	ND	3.9	4.3	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	20.59	15.26	13.43	7.25	8.06	7.94	ND	ND	ND	ND	14.39	14.06	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	INSUFFICIENT DATA
SS	25.0 MG/L	INSUFFICIENT DATA
TP	NA	INSUFFICIENT DATA

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES	START DATE	END DATE	ANTICIPATED COMPLIANCE
COLLECTION SYSTEM - COLLECTION SYSTEM UNDER REVIEW		1991	1992
COLLECTION SYSTEM - SEWAGE UPGRADE UNDERWAY		1991	1992

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : COSBY M.M.
PLANT : NOLLYVILLE LAGOON
WORKS NUMBER : 110002425
TREATMENT : CONVENTIONAL LAGOON SEASONAL
:
:
DESIGN CAPACITY : 0.79 (1000 M3)

REGION : NORTHEAST
DISTRICT : SUDBURY DIST.
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : WOLF RIVER
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 551

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.23	0.24	0.37	0.28	0.37	0.30	0.20	0.18	0.17	0.16	0.18	0.19	0.24	
LAGOON DISCHARGE	ND	ND	ND	70.50	ND	ND	ND	ND	ND	ND	ND	ND	70.50	
BOD5														
INFLUENT (MG/L)	196.0	208.0	46.0	129.0	108.0	90.0	137.0	170.0	175.0	141.0	142.0	233.0	147.9	
EFFLUENT (MG/L)	ND	ND	ND	7.3	ND	ND	ND	ND	ND	ND	ND	ND	7.3	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	2.04	ND	ND	ND	ND	ND	ND	ND	ND	1.75	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	130.0	320.0	111.0	185.0	193.0	275.0	108.0	115.0	332.0	155.0	210.0	185.0	193.3	
EFFLUENT (MG/L)	ND	ND	ND	20.0	ND	ND	ND	ND	ND	ND	ND	ND	20.0	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	5.60	ND	ND	ND	ND	ND	ND	ND	ND	4.80	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	4.7	9.5	3.5	7.1	5.0	4.5	5.6	6.8	7.3	7.2	6.2	10.0	6.5	
EFFLUENT (MG/L)	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	1.4	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	0.39	ND	ND	ND	ND	ND	ND	ND	ND	0.34	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	NA	NA

NO REMEDIAL MEASURES REPORTED

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : DUBREUILVILLE
PLANT : DUBREUILVILLE LAGOON IN OP.1987
WORKS NUMBER : 110001970
TREATMENT : EXFILTRATION LAGOON
:
:
DESIGN CAPACITY : 0.59 (1000 M3)

REGION : NORTHEAST
DISTRICT : ALGOMA
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : NO DISC.TO SURFACE WATER
MINOR BASIN : SUPERIOR
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 1,000

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.37	0.36	0.39	0.40	0.35	0.35	0.29	0.33	0.31	0.36	0.38	0.36	0.35	
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BOD5														
INFLUENT (MG/L)	220.0	425.0	94.0	35.0	40.0	55.0	160.0	18.0	321.0	ND	ND	ND	152.0	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
SUSPENDED SOLIDS														
INFLUENT (MG/L)	120.0	480.0	97.0	35.0	20.0	75.0	70.0	25.0	942.0	ND	ND	ND	207.1	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.5	6.3	7.3	4.6	4.7	5.2	10.4	8.6	7.2	ND	ND	ND	6.8	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	NA	NO DIRECT DISCHARGE
SS	NA	NO DIRECT DISCHARGE
TP	NA	NO DIRECT DISCHARGE

NO REMEDIAL MEASURES REPORTED

NOTE:
BOD - HAS NO CRITERIA
SS - HAS NO CRITERIA
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : ELLIOT LAKE
PLANT : ESTEN LAKE WPCP
WORKS NUMBER : 1200011121
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL CONTINUOUS
: EFFLUENT POLISHING
DESIGN CAPACITY : 13.00 (1000 M3)

REGION : NORTHEAST
DISTRICT : ALGOMA
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : ESTEN LAKE
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 19,000

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	ND	ND	6.19	11.34	7.21	ND	6.70	6.80	6.04	5.84	6.41	5.14	6.85	
BOD5														
INFLUENT (MG/L)	ND	ND	38.0	29.0	54.0	ND	42.0	44.0	80.0	96.0	56.0	82.0	57.9	
EFFLUENT (MG/L)	ND	ND	6.6	4.4	8.0	ND	39.0	29.0	22.1	740.0	23.0	6.5	97.6*	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	40.85	49.89	57.68	ND	261.30	197.20	133.48	4321.60	147.43	33.41	668.56	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	ND	ND	86.0	37.0	49.0	ND	43.0	62.0	112.0	114.0	106.0	95.0	78.2	
EFFLUENT (MG/L)	ND	ND	18.0	10.0	9.0	ND	5.0	13.3	17.4	12.2	10.4	18.0	12.6	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	111.42	113.40	64.89	ND	33.50	90.44	105.09	71.24	66.66	92.52	86.31	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	ND	ND	4.0	2.6	3.4	ND	2.9	3.5	4.3	3.5	2.9	3.4	3.4	
EFFLUENT (MG/L)	ND	ND	0.9	0.6	0.9	ND	0.5	0.8	1.0	0.8	0.6	0.9	0.8	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	5.57	6.80	6.48	ND	3.35	5.44	6.04	4.67	3.84	4.62	5.48	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	NO
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : ENGLEHART
PLANT : ENGLEHART LAGOON
WORKS NUMBER : 110000187
TREATMENT : CONVENTIONAL LAGOON CONTINUOUS
: PHOSPHORUS REMOVAL-CONTINUOUS
:
DESIGN CAPACITY : 0.90 (1000 M3)

REGION : NORTHEAST
DISTRICT : TIMISKAMING
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : ENGLEHART RIVER
MINOR BASIN : OTTAWA RIVER
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 1,730

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.16	1.16	1.44	3.40	2.91	2.86	1.70	1.15	1.21	1.26	1.64	1.17	1.76	
LAGOON DISCHARGE	35.80	32.54	44.70	101.78	90.20	85.80	52.00	43.86	36.36	39.10	49.24	49.20	55.05	
BOD5														
INFLUENT (MG/L)	149.0	138.0	84.0	45.0	31.0	50.0	58.0	67.0	84.0	83.0	73.0	148.0	84.2	
EFFLUENT (MG/L)	6.6	9.1	13.5	11.2	8.3	3.4	2.1	2.1	2.9	2.1	1.4	5.5	5.7	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	7.65	10.55	19.44	38.08	24.15	9.72	3.57	2.41	3.50	2.64	2.29	6.43	10.03	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	210.0	240.0	140.0	157.0	106.0	85.0	87.0	92.0	95.0	165.0	150.0	150.0	139.8	
EFFLUENT (MG/L)	35.0	32.5	32.5	27.5	26.3	14.5	12.5	3.6	2.5	3.5	4.3	2.0	16.4	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	40.60	37.70	46.80	93.50	76.53	41.47	21.25	4.14	3.02	4.41	7.05	2.34	28.86	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	30.4	6.1	4.1	1.8	1.9	2.5	3.5	ND	4.2	4.7	5.3	4.1	6.2	
EFFLUENT (MG/L)	0.6	1.1*	1.4*	0.9	0.2	0.2	0.5	0.5	0.9	0.5	0.2	0.3	0.6	2
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	0.69	1.27	2.01	3.06	0.58	0.57	0.85	0.57	1.08	0.63	0.32	0.35	1.06	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	1.0 MG/L	NO

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES

	START DATE	END DATE	ANTICIPATED COMPLIANCE
OPERATIONAL/PROCESS - MONITORING PROCEDURES BEING UPGRADED			

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : ESPANOLA
PLANT : ESPANOLA WPCP
WORKS NUMBER : 1100000212
TREATMENT : PRIMARY
:
:
DESIGN CAPACITY : 3.00 (1000 M3)

REGION : NORTHEAST
DISTRICT : SUDBURY DIST.
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : SPANISH RIVER
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 5,200

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	2.66	2.64	2.96	2.72	2.63	2.80	2.66	2.62	2.77	2.64	2.79	2.65	2.71	
BOD5														
INFLUENT (MG/L)	82.0	90.0	93.0	60.0	61.0	54.0	89.0	59.0	51.0	60.0	68.0	125.0	74.3	
EFFLUENT (MG/L)	54.0	58.5	50.0	40.0	34.0	31.5	59.0	26.7	38.5	25.5	43.5	90.0	45.9	
LOADING (KG/D)	143.64	154.44	148.00	108.80	89.42	88.20	156.94	69.95	106.64	67.32	121.36	238.50	124.39	
PERCENT REMOVAL	34	35	46	33	44	42	34	55	25	58	36	28	38	
PERCENT REMOVAL LIMITS													30	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	110.0	120.0	100.0	105.0	130.0	68.0	73.0	60.0	37.0	73.0	95.0	130.0	91.8	
EFFLUENT (MG/L)	65.0	52.5	65.0	52.5	52.5	42.5	32.5	35.0	27.5	37.5	42.5	70.0	47.9	
LOADING (KG/D)	172.90	138.60	192.40	142.80	138.07	119.00	86.45	91.70	76.17	99.00	118.57	185.50	129.81	
PERCENT REMOVAL	41	56	35	50	60	38	55	42	26	49	55	46	48*	
PERCENT REMOVAL LIMITS													50	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	5.5	5.1	4.3	4.8	5.5	3.6	6.1	7.9	5.4	5.2	5.5	5.8	5.4	
EFFLUENT (MG/L)	5.5	5.0	5.3	4.5	6.6	5.7	5.2	5.2	4.4	4.4	ND	7.2	5.4	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	14.63	13.20	15.68	12.24	17.35	15.96	13.83	13.62	12.18	11.61	ND	19.08	14.63	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	30%	YES
SS	50%	NO
TP	NA	NA

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES

START DATE	END DATE	ANTICIPATED COMPLIANCE

SLUDGE DISPOSAL/REMOVAL - SLUDGE QUALITY BEING IMPROVED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : FAUQUIER-STRICKLAND
PLANT : FAUQUIER LAGOON
WORKS NUMBER : 110001792
TREATMENT : CONVENTIONAL LAGOON SEASONAL
:
:
DESIGN CAPACITY : 0.27 (1000 M3)

REGION : NORTHEAST
DISTRICT : COCHRANE
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : GROUNDHOG RIVER
MINOR BASIN : JAMES BAY
MAJOR BASIN : ARCTIC WATERSHED
POPULATION SERVED : 650

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	ND	ND	ND	ND	ND	ND	ND	0.43	0.30	ND	ND	ND	0.37	
LAGOON DISCHARGE	ND	ND	ND	ND	48.60	ND	ND	ND	ND	ND	ND	ND	48.60	
BOD5														
INFLUENT (MG/L)	ND	440.0	190.0	48.0	ND	78.0	60.0	75.0	130.0	ND	ND	ND	145.9	
EFFLUENT (MG/L)	ND	ND	ND	ND	5.9	ND	ND	ND	7.5	ND	ND	ND	6.7	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	2.25	ND	ND	ND	2.48	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	ND	270.0	590.0	160.0	ND	80.0	75.0	110.0	70.0	ND	ND	ND	193.6	
EFFLUENT (MG/L)	ND	ND	ND	ND	8.3	ND	ND	ND	25.0	ND	ND	ND	16.7	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	7.50	ND	ND	ND	6.18	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	ND	5.0	4.1	3.4	ND	3.0	3.8	5.7	4.2	ND	ND	3.4	4.1	
EFFLUENT (MG/L)	ND	ND	ND	ND	0.7	ND	ND	ND	0.4	ND	ND	ND	0.6	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	0.12	ND	ND	ND	0.22	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	NA	NA

NO REMEDIAL MEASURES REPORTED

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : GORE BAY
PLANT : GORE BAY LAGOON
WORKS NUMBER : 1100025515
TREATMENT : CONVENTIONAL LAGOON SEASONAL
:
:
DESIGN CAPACITY : 0.63 (1000 M3)

REGION : NORTHEAST
DISTRICT : MANITOULIN
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : LAKE HURON
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 780

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.48	0.37	0.60	0.79	0.38	0.41	0.37	0.37	0.38	0.32	0.43	0.37	0.44	
LAGOON DISCHARGE	ND	ND	ND	ND	133.92	ND	ND	ND	ND	ND	33.48	ND	83.70	
BOD5														
INFLUENT (MG/L)	21.0	62.0	106.0	10.0	85.0	65.0	175.0	110.0	210.0	120.0	65.0	127.0	96.3	
EFFLUENT (MG/L)	ND	ND	ND	ND	7.8	ND	ND	ND	ND	ND	4.1	ND	6.0	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	ND	2.96	ND	ND	ND	ND	ND	1.76	ND	2.64	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	20.0	65.0	65.0	20.0	60.0	50.0	100.0	70.0	70.0	60.0	58.0	140.0	64.8	
EFFLUENT (MG/L)	ND	ND	ND	ND	23.4	ND	ND	ND	ND	ND	0.1	ND	11.8	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	ND	8.89	ND	ND	ND	ND	ND	0.04	ND	5.19	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	2.4	6.2	2.7	0.9	14.7	3.6	6.8	6.0	9.8	8.0	4.6	7.1	6.1	
EFFLUENT (MG/L)	ND	ND	ND	ND	1.9	ND	ND	ND	ND	ND	ND	ND	1.9	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	0.72	ND	ND	ND	ND	ND	ND	ND	0.84	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	NA	NA

NO REMEDIAL MEASURES REPORTED

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : HAILEYBURY
PLANT : LAKE TEMISKAMING NEW WPCP
WORKS NUMBER : 110002158
TREATMENT : EXTENDED AERATION
: PHOSPHORUS REMOVAL-CONTINUOUS
:
DESIGN CAPACITY : 1.60 (1000 M3)

REGION : NORTHEAST
DISTRICT : TIMISKAMING
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : LAKE TEMISKAMING
MINOR BASIN : OTTAWA RIVER
MAJOR BASIN : GREAT LAKES
POPULATION SERVED :

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.38	1.32	1.55	1.87	1.68	1.75	1.24	1.33	1.33	1.28	1.50	1.41	1.47	
BODS														
INFLUENT (MG/L)	59.0	9.0	98.0	51.0	24.0	74.0	64.0	26.0	89.0	153.0	70.0	26.0	61.9	
EFFLUENT (MG/L)	3.2	3.0	6.9	2.0	2.5	1.0	1.3	1.5	1.5	2.6	2.0	6.0	2.8	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	4.41	3.96	10.69	3.74	4.20	1.75	1.61	1.99	1.99	3.32	3.00	8.46	4.12	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	65.0	47.0	71.0	77.0	83.0	131.0	71.7	45.0	84.0	67.0	72.0	93.0	75.6	
EFFLUENT (MG/L)	12.4	14.4	28.0	11.4	14.2	6.8	12.3	7.0	4.6	15.0	10.2	6.5	11.9	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	17.11	19.00	43.40	21.31	23.85	11.90	15.25	9.31	6.11	19.20	15.30	9.16	17.49	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	3.8	1.6	2.0	2.4	3.2	3.4	ND	2.1	2.3	ND	6.1	2.2	2.9	
EFFLUENT (MG/L)	0.2	0.3	1.2*	0.2	0.1	0.1	0.2	0.3	0.2	0.2	0.3	0.1	0.3	1
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	0.27	0.39	1.86	0.37	0.16	0.17	0.24	0.39	0.26	0.25	0.45	0.14	0.44	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	NO

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES	START DATE	END DATE	ANTICIPATED COMPLIANCE
OPERATIONAL/PROCESS - SAMPLING PROGRAM BEING MODIFIED	1990/01		

1989 CERTIFICATE OF APPROVAL ASSESSMENT

MUNICIPALITY : HAILEYBURY
PLANT : LAKE TIMISKAMING OLD WPCP
WORKS NUMBER : 110000410
TREATMENT : EXTENDED AERATION
: PHOSPHORUS REMOVAL CONTINUOUS
:
DESIGN CAPACITY : 1.99 (1000 M3)

REGION : NORTHEAST
DISTRICT : TIMISKAMING
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : LAKE TIMISKAMING
MINOR BASIN : OTTAWA RIVER
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 3,240

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.31	1.26	1.54	2.19	2.07	2.02	1.50	1.54	1.46	1.39	1.62	1.37	1.61	
BOD5														
INFLUENT (MG/L)	ND	70.0	98.0	51.0	24.0	74.0	64.0	26.0	89.0	153.0	70.0	26.0	67.7	
EFFLUENT (MG/L)	ND	3.4	6.9	1.6	1.7	9.0	2.4	1.3	1.7	0.8	3.0	4.2	3.3	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	4.28	10.62	3.50	3.51	18.18	3.60	2.00	2.48	1.11	4.86	5.75	5.31	
LOADING LIMIT (KG/D)													68.20	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	81.0	60.0	71.0	77.0	83.0	131.0	61.0	60.0	83.0	67.0	72.0	93.0	78.3	
EFFLUENT (MG/L)	11.3	5.5	28.7	11.7	13.0	6.0	6.6	7.7	5.5	8.5	7.8	11.8	10.3	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	14.80	6.93	44.19	25.62	26.91	12.12	9.90	11.85	8.03	11.81	12.63	16.16	16.58	
LOADING LIMIT (KG/D)													68.20	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	ND	4.7	2.0	2.4	3.2	4.8	3.8	2.1	2.3	ND	6.1	1.4	3.3	
EFFLUENT (MG/L)	0.1	0.3	1.1	0.2	0.1	0.2	0.6	0.2	0.1	0.2	0.8	0.3	0.4	
CONCENTRATION LIMIT (MG/L)													1.0	
LOADING (KG/D)	0.13	0.37	1.69	0.43	0.20	0.40	0.90	0.30	0.14	0.27	1.29	0.41	0.64	
LOADING LIMIT (KG/D)													2.70	

SUMMARY

PARM	CRITERIA	LOADING	COMPLIES WITH CONC	COMPLIES WITH LOADING
BOD	25.0 MG/L	68.20 KG/D	YES	YES
SS	25.0 MG/L	68.20 KG/D	YES	YES
TP	1.0 MG/L	2.70 KG/D	YES	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED ANNUALLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (E.G. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES

	START DATE	END DATE	ANTICIPATED COMPLIANCE
OPERATIONAL/PROCESS - SAMPLING PROGRAM BEING MODIFIED	1990/01		

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : HAILEYBURY
PLANT : LAKE TEMISKAMING OLD WPCP
WORKS NUMBER : 110000310
TREATMENT : EXTENDED AERATION
: PHOSPHORUS REMOVAL-CONTINUOUS
:
DESIGN CAPACITY : 1.59 (1000 M3)

REGION : NORTHEAST
DISTRICT : TIMISKAMING
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : LAKE TIMISKAMING
MINOR BASIN : OTTAWA RIVER
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 3,240

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.31	1.26	1.54	2.19	2.07	2.02	1.50	1.54	1.46	1.39	1.62	1.37	1.61	
BOD5														
INFLUENT (MG/L)	ND	70.0	98.0	51.0	24.0	74.0	64.0	26.0	89.0	153.0	70.0	26.0	67.7	
EFFLUENT (MG/L)	ND	3.4	6.9	1.6	1.7	9.0	2.4	1.3	1.7	0.8	3.0	4.2	3.3	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	4.28	10.62	3.50	3.51	18.18	3.60	2.00	2.48	1.11	4.86	5.75	5.31	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	81.0	60.0	71.0	77.0	83.0	131.0	61.0	60.0	83.0	67.0	72.0	93.0	78.3	
EFFLUENT (MG/L)	11.3	5.5	28.7	11.7	13.0	6.0	6.6	7.7	5.5	8.5	7.8	11.8	10.3	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	14.80	6.93	44.19	25.62	26.91	12.12	9.90	11.85	8.03	11.81	12.63	16.16	16.58	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	ND	4.7	2.0	2.4	3.2	4.8	3.8	2.1	2.3	ND	6.1	1.4	3.3	
EFFLUENT (MG/L)	0.1	0.3	1.1*	0.2	0.1	0.2	0.6	0.2	0.1	0.2	0.8	0.3	0.4	1
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	0.13	0.37	1.69	0.43	0.20	0.40	0.90	0.30	0.14	0.27	1.29	0.41	0.64	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	NO

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED ANNUALLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES	START DATE	END DATE	ANTICIPATED COMPLIANCE
OPERATIONAL/PROCESS - SAMPLING PROGRAM BEING MODIFIED	1990/01		

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : HAILEYBURY
PLANT : NORTH COBALT LAGOON
WORKS NUMBER : 110001302
TREATMENT : AERATED CELL PLUS LAGOON
: PHOSPHORUS REMOVAL-CONTINUOUS
:
DESIGN CAPACITY : 0.34 (1000 M3)

REGION : NORTHEAST
DISTRICT : TIMISKAMING
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : FARR CREEK
MINOR BASIN : OTTAWA RIVER
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 800

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.31	0.32	0.49	0.85	0.90	0.73	0.36	0.40	0.45	ND	0.51	0.30	0.51	
LAGOON DISCHARGE	9.59	8.94	15.23	25.34	59.28	ND	2.82	12.29	13.55	ND	ND	ND	18.38	
BOD5														
INFLUENT (MG/L)	119.0	120.5	126.5	69.0	41.0	107.0	107.0	90.0	143.0	ND	82.0	135.0	103.6	
EFFLUENT (MG/L)	ND	ND	57.0	15.8	17.4	ND	13.0	11.0	15.0	ND	ND	ND	21.5	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	27.93	13.43	15.66	ND	4.68	4.40	6.75	ND	ND	ND	10.97	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	105.0	97.5	155.0	130.0	93.0	29.0	47.0	95.0	87.0	ND	65.0	135.0	94.4	
EFFLUENT (MG/L)	ND	ND	15.0	67.5	18.8	ND	20.0	15.0	42.5	ND	ND	ND	29.8	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	7.35	57.37	16.92	ND	7.20	6.00	19.12	ND	ND	ND	15.20	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	5.0	6.7	8.8	4.1	3.1	3.7	6.2	5.2	6.7	ND	3.1	4.3	5.2	
EFFLUENT (MG/L)	ND	ND	5.7*	1.5*	2.1*	ND	0.8	2.1*	2.0*	ND	ND	ND	2.4	5
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	2.79	1.27	1.89	ND	0.28	0.84	0.90	ND	ND	ND	1.22	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	NA	NA

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : HALLEBOURG
PLANT : HALLEBOURG LAGOON
WORKS NUMBER : 120002031
TREATMENT : CONVENTIONAL LAGOON SEASONAL
: PHOSPHORUS REMOVAL - BATCH
:
DESIGN CAPACITY : 24.00 (1000 M3)

REGION : NORTHEAST
DISTRICT : COCHRANE
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : LAKE MCILWROTH
MINOR BASIN : JAMES BAY
MAJOR BASIN : ARCTIC WATERSHED
POPULATION SERVED : 260

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
LAGOON DISCHARGE	ND	ND	ND	ND	8.28	ND	ND	ND	ND	8.28	ND	ND	8.28	
BOD5														
INFLUENT (MG/L)	315.0	275.0	255.0	260.0	255.0	140.0	265.0	170.0	220.0	ND	ND	155.0	231.0	
EFFLUENT (MG/L)	ND	ND	ND	ND	6.8	ND	ND	ND	ND	1.3	ND	ND	4.1	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
SUSPENDED SOLIDS														
INFLUENT (MG/L)	260.0	340.0	250.0	230.0	180.0	150.0	100.0	220.0	230.0	ND	ND	130.0	209.0	
EFFLUENT (MG/L)	ND	ND	ND	ND	3.0	ND	ND	ND	ND	4.0	ND	ND	3.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	12.0	13.0	13.0	8.4	11.4	5.7	8.3	11.8	7.3	ND	ND	9.2	10.0	
EFFLUENT (MG/L)	ND	ND	ND	ND	0.5	ND	ND	ND	ND	0.8	ND	ND	0.7	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NO REMEDIAL MEASURES REPORTED

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : HEARST
PLANT : CECILE TRAILER PARK LAGOON
WORKS NUMBER : 120001997
TREATMENT : CONVENTIONAL LAGOON SEASONAL
:
:
DESIGN CAPACITY : 0.07 (1000 M3) CONTINUOUS

REGION : NORTHEAST
DISTRICT : COCHRANE
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : MATTAWISKIA
MINOR BASIN : JAMES BAY
MAJOR BASIN : ARCTIC WATERSHED
POPULATION SERVED : 140

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	ND	ND	ND	ND	ND	0.02	0.01	0.01	0.01	0.02	0.02	0.02	0.02	
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BOD5														
INFLUENT (MG/L)	ND	200.0	ND	64.0	70.0	96.0	130.0	ND	160.0	140.0	160.0	120.0	126.7	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	14.0	ND	ND	4.2	2.0	ND	ND	6.7	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	0.28	ND	ND	0.04	0.04	ND	ND	0.13	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	ND	100.0	ND	55.0	60.0	85.0	65.0	ND	85.0	120.0	150.0	60.0	86.7	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	15.0	ND	ND	10.0	20.0	ND	ND	15.0	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	0.30	ND	ND	0.10	0.40	ND	ND	0.30	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	ND	10.0	ND	3.9	4.2	5.9	7.2	ND	7.5	17.0	7.7	4.1	7.5	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	1.7	ND	ND	1.9	1.9	ND	ND	1.8	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	0.03	ND	ND	0.01	0.03	ND	ND	0.04	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	INSUFFICIENT DATA
SS	40.0 MG/L	INSUFFICIENT DATA
TP	NA	INSUFFICIENT DATA

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : HEARST
PLANT : HEARST LAGOON
WORKS NUMBER : 110000338
TREATMENT : AERATED CELL PLUS LAGOON
: CONTINUOUS DISCHARGE
: REGULATED DISCHARGE VOLUME
DESIGN CAPACITY : 6.81 (1000 M3)

REGION : NORTHEAST
DISTRICT : COCHRANE
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : MATTAWISHKWIA RIVER
MINOR BASIN : JAMES BAY
MAJOR BASIN : ARCTIC WATERSHED
POPULATION SERVED : 5,270

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.80	2.13	2.50	4.39	3.48	2.81	2.38	2.70	2.43	2.55	3.10	2.01	2.69	
LAGOON DISCHARGE	ND	ND	ND	ND	873.66	ND	ND	ND	ND	110.76	105.39	ND	363.27	
BOD5														
INFLUENT (MG/L)	122.0	78.0	72.0	95.0	48.0	94.0	68.0	43.0	101.0	55.0	101.0	145.0	85.2	
EFFLUENT (MG/L)	ND	ND	ND	ND	17.3	ND	ND	ND	ND	1.4	ND	ND	9.4	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	ND	60.20	ND	ND	ND	ND	3.57	ND	ND	25.29	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	98.0	68.0	65.0	293.0	47.0	108.0	40.0	210.0	95.0	120.0	235.0	670.0	170.8	
EFFLUENT (MG/L)	ND	ND	ND	ND	42.5	ND	ND	ND	ND	3.2	ND	ND	22.9	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	ND	147.90	ND	ND	ND	ND	8.16	ND	ND	61.60	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	5.4	4.6	4.6	4.8	2.8	4.4	5.1	3.0	4.3	3.1	2.6	5.0	4.1	
EFFLUENT (MG/L)	ND	ND	ND	ND	2.4	ND	ND	ND	ND	1.1	1.6	ND	1.7	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	8.35	ND	ND	ND	ND	2.80	4.96	ND	4.57	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	NA	NA

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : HORNEPAYNE
PLANT : HORNEPAYNE WPCP
WORKS NUMBER : 110001952
TREATMENT : EXTENDED AERATION
:
:
DESIGN CAPACITY : 1.36 (1000 M3)

REGION : NORTHEAST
DISTRICT : ALGOMA
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : JACKFISH RIVER
MINOR BASIN : JAMES BAY
MAJOR BASIN : ARCTIC WATERSHED
POPULATION SERVED : 1,675

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.77	0.68	0.98	1.45	1.28	0.90	0.80	1.23	0.78	0.90	1.17	0.77	0.98	
BOD5														
INFLUENT (MG/L)	77.0	113.0	80.0	52.0	59.0	54.0	62.0	50.0	63.0	71.0	32.0	121.0	69.5	
EFFLUENT (MG/L)	8.7	3.5	5.4	8.5	2.0	23.4	0.9	1.7	4.6	3.0	3.1	5.0	5.8	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	6.69	2.38	5.29	12.32	2.56	21.06	0.72	2.09	3.58	2.70	3.62	3.85	5.68	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	95.0	130.0	83.0	48.0	48.0	48.0	35.0	35.0	47.5	73.0	55.0	73.0	64.2	
EFFLUENT (MG/L)	8.5	8.5	15.0	15.0	4.0	16.0	4.5	4.0	7.0	5.4	10.0	17.5	9.8	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	6.54	5.78	14.70	21.75	5.12	16.20	3.60	4.92	5.46	4.86	11.70	13.47	9.60	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	4.2	5.0	4.9	2.6	2.8	3.7	2.4	3.0	3.9	5.2	2.3	4.1	3.7	
EFFLUENT (MG/L)	2.8	2.8	1.7	1.5	1.4	3.4	1.4	2.2	0.7	1.1	1.3	2.5	1.9	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	2.15	1.90	1.66	2.17	1.79	3.06	1.12	2.70	0.54	0.99	1.52	1.92	1.86	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	NA	NA

NO REMEDIAL MEASURES REPORTED

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : IROQUOIS FALLS
PLANT : IROQUOIS FALLS WPCP
WORKS NUMBER : 110002121
TREATMENT : CONTACT STABILIZATION
:
:
DESIGN CAPACITY : 4.09 (1000 M3)

REGION : NORTHEAST
DISTRICT : COCHRANE
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : ABITIBI RIVER
MINOR BASIN : JAMES BAY
MAJOR BASIN : ARCTIC WATERSHED
POPULATION SERVED : 5,575

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	2.64	2.54	2.94	5.29	4.13	3.74	3.04	3.25	2.92	3.02	3.70	2.88	3.34	
BOD5														
INFLUENT (MG/L)	130.0	101.0	97.0	50.0	40.0	49.0	25.0	41.0	77.0	104.0	45.0	69.0	69.0	
EFFLUENT (MG/L)	14.0	18.0	18.5	12.1	30.5	27.5	19.0	30.5	22.0	32.5	16.5	19.0	21.7	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	36.96	45.72	54.39	64.00	125.96	102.85	57.76	99.12	64.24	98.15	61.05	54.72	72.48	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	135.0	83.0	78.0	44.0	62.0	63.0	39.0	70.7	104.3	88.0	63.0	56.0	73.8	
EFFLUENT (MG/L)	6.5	7.7	6.6	5.0	7.3	7.3	6.3	8.7	5.0	5.8	8.4	13.4	7.3	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	17.16	19.55	19.40	26.45	30.14	27.30	19.15	28.27	14.60	17.51	31.08	38.59	24.38	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	5.8	5.5	8.2	2.8	3.4	3.9	3.2	5.0	4.3	3.1	3.0	3.8	4.3	
EFFLUENT (MG/L)	ND	2.7	3.1	1.6	1.6	1.2	ND	7.3	2.8	2.5	ND	2.2	2.8	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	6.85	9.11	8.46	6.60	4.48	ND	23.72	8.17	7.55	ND	6.33	9.35	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	NA	NA

NO REMEDIAL MEASURES REPORTED

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : IROQUOIS FALLS
PLANT : IROQUOIS JUNCTION LAGOON
WORKS NUMBER : 120003290
TREATMENT : CONVENTIONAL LAGOON SEASONAL
: SINGLE CELL
:
DESIGN CAPACITY : 0.04 (1000 M3)

REGION : NORTHEAST
DISTRICT : COCHRANE
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : STATION CR.TO MEADOW CR.
MINOR BASIN : JAMES BAY
MAJOR BASIN : ARCTIC WATERSHED
POPULATION SERVED : 176

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.05	0.05	0.07	0.14	0.13	0.11	0.08	0.09	0.07	0.08	0.10	0.06	0.09	
LAGOON DISCHARGE		ND		ND	20.00	ND	ND	ND	ND	ND	ND	ND	6.67	
BOD5														
INFLUENT (MG/L)	142.0	160.0	69.0	16.0	31.0	47.0	78.0	108.0	77.0	88.0	118.0	159.0	91.1	
EFFLUENT (MG/L)	ND	ND	ND	ND	11.7	ND	ND	ND	ND	ND	ND	ND	11.7	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	ND	1.52	ND	ND	ND	ND	ND	ND	ND	1.05	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	225.0	85.0	77.0	100.0	45.0	38.0	20.0	120.0	95.0	88.0	110.0	120.0	93.6	
EFFLUENT (MG/L)	ND	ND	4.5	4.5	10.0	3.0	ND	ND	ND	ND	ND	ND	5.5	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	0.31	0.63	1.30	0.33	ND	ND	ND	ND	ND	ND	0.50	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	7.0	5.0	5.0	1.2	2.6	3.1	3.4	5.9	5.8	5.2	3.9	6.5	4.6	
EFFLUENT (MG/L)	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	1.5	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	0.19	ND	ND	ND	ND	ND	ND	ND	0.14	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	NA	NA

NO REMEDIAL MEASURES REPORTED

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : JOGUES
PLANT : JOGUES LAGOON
WORKS NUMBER : 120002022
TREATMENT : CONVENTIONAL LAGOON SEASONAL
: PHOSPHORUS REMOVAL - BATCH
:
DESIGN CAPACITY : 27.00 (1000 M3)

REGION : NORTHEAST
DISTRICT : COCHRANE
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : PRUNE CREEK
MINOR BASIN : JAMES BAY
MAJOR BASIN : ARCTIC WATERSHED
POPULATION SERVED : 215

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BOD5														
INFLUENT (MG/L)	225.0	180.0	220.0	138.0	185.0	88.0	165.0	226.0	ND	175.0	302.0	185.0	189.9	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
SUSPENDED SOLIDS														
INFLUENT (MG/L)	85.0	60.0	140.0	210.0	160.0	75.0	150.0	110.0	ND	95.0	190.0	170.0	131.4	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	11.0	13.0	13.0	7.2	6.5	5.2	6.7	8.7	ND	8.5	8.5	8.8	8.8	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	NO DISCHARGE
SS	25.0 MG/L	NO DISCHARGE
TP	1.0 MG/L	NO DISCHARGE

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : KAPUSKASING
PLANT : KAPUSKASING WEST END WPCP
WORKS NUMBER : 120002059
TREATMENT : EXTENDED AERATION
:
:
DESIGN CAPACITY : 0.68 (1000 M3)

REGION : NORTHEAST
DISTRICT : COCHRANE
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : KAPUSKASING RIVER
MINOR BASIN : JAMES BAY
MAJOR BASIN : ARCTIC WATERSHED
POPULATION SERVED :

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BOD5														
INFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
SUSPENDED SOLIDS														
INFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	25.0	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	NA	NO DISCHARGE
SS	25.0 MG/L	NO DISCHARGE
TP	NA	NO DISCHARGE

NOTE:
BOD - HAS NO CRITERIA
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : KAPUSKASING
PLANT : KAPUSKASING WPCP
WORKS NUMBER : 110003004
TREATMENT : EXTENDED AERATION
:
:
DESIGN CAPACITY : 9.09 (1000 M3)

REGION : NORTHEAST
DISTRICT : COCHRANE
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : KAPUSKASING RIVER
MINOR BASIN : JAMES BAY
MAJOR BASIN : ARCTIC WATERSHED
POPULATION SERVED : 12,500

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	5.28	5.24	6.24	10.57	10.55	7.47	6.11	6.29	5.55	6.12	7.27	5.08	6.81	
BOD5														
INFLUENT (MG/L)	150.0	133.0	170.0	50.0	51.0	54.0	104.5	117.8	113.6	84.0	87.0	66.0	98.4	
EFFLUENT (MG/L)	15.5	9.3	6.1	8.3	3.5	6.3	4.1	6.3	7.9	29.0	4.9	3.0	8.7	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	81.84	48.73	38.06	87.73	36.92	47.06	25.05	39.62	43.84	177.48	35.62	15.24	59.25	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	111.0	121.0	258.0	220.0	79.0	83.0	73.0	110.7	99.5	190.0	96.0	83.0	127.0	
EFFLUENT (MG/L)	10.8	15.2	9.3	5.3	4.5	4.0	4.3	4.6	6.3	5.6	7.9	13.3	7.6	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	57.02	79.64	58.03	56.02	47.47	29.88	26.27	28.93	34.96	34.27	57.43	67.56	51.76	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	ND	4.8	ND	2.6	3.6	3.0	3.1	7.2	3.5	4.8	4.5	3.8	4.1	
EFFLUENT (MG/L)	ND	2.2	0.7	0.4	1.0	1.7	2.0	1.6	1.5	2.4	2.0	6.6	2.0	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	11.52	4.36	4.22	10.55	12.69	12.22	10.06	8.32	14.68	14.54	33.52	13.62	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	NA	NA

NO REMEDIAL MEASURES REPORTED

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : KIRKLAND LAKE
PLANT : KIRKLAND LAKE WPCP
WORKS NUMBER : 120000015
TREATMENT : CONTACT STABILIZATION
: PHOSPHORUS REMOVAL-CONTINUOUS
:
DESIGN CAPACITY : 13.63 (1000 M3)

REGION : NORTHEAST
DISTRICT : TIMISKAMING
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : MURDOCK CREEK
MINOR BASIN : OTTAWA RIVER
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 12,500

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	11.39	10.98	12.88	19.57	15.36	11.12	9.32	9.34	7.26	8.84	10.96	11.77	11.57	
BODS														
INFLUENT (MG/L)	41.0	50.0	49.0	26.0	33.0	38.0	14.0	60.3	50.0	50.0	38.0	31.0	40.0	
EFFLUENT (MG/L)	5.4	12.0	7.0	4.5	6.7	8.8	5.5	2.3	5.0	6.9	14.6	4.0	6.9	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	61.50	131.76	90.16	88.06	102.91	97.85	51.26	21.48	36.30	60.99	160.01	47.08	79.83	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	66.0	65.0	56.0	37.0	39.0	61.0	43.6	77.0	67.0	91.0	63.0	46.0	59.3	
EFFLUENT (MG/L)	25.2	20.4	22.0	18.6	14.6	9.8	7.6	9.6	12.5	13.0	12.1	17.0	15.2	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	287.02	223.99	283.36	364.00	224.25	108.97	70.83	89.66	90.75	114.92	132.61	200.09	175.86	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	3.0	3.2	2.8	2.2	2.4	3.2	3.0	3.5	4.7	3.8	3.1	2.6	3.1	
EFFLUENT (MG/L)	0.9	1.3*	1.1*	0.5	0.5	0.4	0.6	0.9	1.2*	0.8	0.5	0.6	0.8	3
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	10.25	14.27	14.16	9.78	7.68	4.44	5.59	8.40	8.71	7.07	5.48	7.06	9.26	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	NO

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES

START DATE	END DATE	ANTICIPATED COMPLIANCE

NO ACTION - MARGINAL FAILURE-MONITORING LEVEL OF FAILED PARAMETER CLOSELY

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : KIRKLAND LAKE
PLANT : SWASTIKA WPCP
WORKS NUMBER : 120001942
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
:
:
DESIGN CAPACITY : 0.39 (1000 M3)

REGION : NORTHEAST
DISTRICT : TIMISKAMING
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : OTTO LAKE
MINOR BASIN : OTTAWA RIVER
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 700

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BOD5														
INFLUENT (MG/L)	82.0	ND	40.0	26.0	38.0	56.0	74.0	92.0	108.0	100.0	70.0	70.0	68.7	
EFFLUENT (MG/L)	7.8	ND	3.5	3.6	2.1	2.4	2.8	2.3	3.4	2.8	3.6	15.0	4.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
SUSPENDED SOLIDS														
INFLUENT (MG/L)	95.0	ND	85.0	40.0	60.0	40.0	45.0	60.0	110.0	100.0	90.0	55.0	70.9	
EFFLUENT (MG/L)	35.0	ND	15.0	15.0	15.0	20.0	15.5	10.0	10.0	10.0	15.0	20.0	16.4	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	4.3	ND	3.1	1.3	2.7	4.7	4.6	3.8	5.6	3.5	3.6	2.6	3.6	
EFFLUENT (MG/L)	1.1	ND	0.7	0.5	ND	1.0	0.6	0.6	1.0	ND	0.7	0.8	0.8	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	NA	NA

NO REMEDIAL MEASURES REPORTED

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : LARDER LAKE
PLANT : LARDER LAKE TOWNSITE WPCP
WORKS NUMBER : 120000033
TREATMENT : EXFILTRATION LAGOON
:
:
DESIGN CAPACITY : 0.59 (1000 M3)

REGION : NORTHEAST
DISTRICT : TIMISKAMING
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : LARDER LAKE
MINOR BASIN : OTTAWA RIVER
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 1,100

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BOD5														
INFLUENT (MG/L)	88.0	100.0	65.0	ND	20.0	54.0	ND	36.0	275.0	74.0	72.0	ND	87.1	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
SUSPENDED SOLIDS														
INFLUENT (MG/L)	100.0	60.0	75.0	ND	50.0	55.0	ND	90.0	140.0	95.0	100.0	ND	85.0	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	4.3	5.3	5.3	ND	1.3	2.9	ND	1.8	5.5	3.8	3.3	ND	3.7	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	NA	NO DIRECT DISCHARGE
SS	NA	NO DIRECT DISCHARGE
TP	NA	NO DIRECT DISCHARGE

NOTE:
BOD - HAS NO CRITERIA
SS - HAS NO CRITERIA
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : LATCHFORD
PLANT : LATCHFORD WPCP
WORKS NUMBER : 110001774
TREATMENT : EXTENDED AERATION
:
:
DESIGN CAPACITY : 0.34 (1000 M3)

REGION : NORTHEAST
DISTRICT : TIMISKAMING
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : MONTREAL RIVER
MINOR BASIN : OTTAWA RIVER
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 427

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.41	0.32	0.51	0.61	0.48	0.39	0.31	0.26	0.25	0.27	0.25	0.27	0.36	
BOD5														
INFLUENT (MG/L)	77.0	40.0	29.0	27.0	18.0	45.0	37.0	145.0	69.0	65.0	94.0	62.0	59.0	
EFFLUENT (MG/L)	6.0	11.2	4.8	5.0	7.9	3.8	1.7	2.9	1.5	7.2	22.0	2.0	6.3	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	2.46	3.58	2.44	3.05	3.79	1.48	0.52	0.75	0.37	1.94	5.50	0.54	2.27	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	140.0	45.0	45.0	37.0	30.0	82.0	87.5	495.0	47.5	265.0	75.0	30.0	114.9	
EFFLUENT (MG/L)	18.7	12.4	10.8	11.5	14.1	12.3	10.2	9.6	10.6	9.0	12.5	19.5	12.6	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	7.66	3.96	5.50	7.01	6.76	4.79	3.16	2.49	2.65	2.43	3.12	5.26	4.54	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	3.7	2.1	1.6	1.7	1.0	2.5	3.9	5.6	3.2	4.8	2.5	1.7	2.9	
EFFLUENT (MG/L)	0.9	3.0	0.4	0.4	0.5	0.5	0.4	0.3	0.6	1.1	1.1	1.2	0.9	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	0.36	0.96	0.20	0.24	0.24	0.19	0.12	0.07	0.15	0.29	0.27	0.32	0.32	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	NA	NA

NO REMEDIAL MEASURES REPORTED

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : LITTLE CURRENT
PLANT : LITTLE CURRENT LAGOON
WORKS NUMBER : 110000392
TREATMENT : CONVENTIONAL LAGOON SEASONAL
:
:
DESIGN CAPACITY : 0.92 (1000 M3)

REGION : NORTHEAST
DISTRICT : MANITOULIN
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : DITCH TO GEORGIAN BAY
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 1,500

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.82	0.88	1.48	1.72	0.86	0.72	0.66	0.66	0.58	0.64	0.80	ND	0.89	
LAGOON DISCHARGE	ND	ND	ND	ND	141.20	ND	ND	ND	ND	ND	154.00	ND	147.60	
BOD5														
INFLUENT (MG/L)	80.0	52.0	ND	ND	122.0	ND	ND	ND	116.0	95.0	ND	ND	93.0	
EFFLUENT (MG/L)	ND	ND	ND	ND	21.9	ND	ND	ND	ND	ND	5.9	ND	13.9	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	ND	18.83	ND	ND	ND	ND	ND	4.72	ND	12.37	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	95.0	100.0	ND	ND	70.0	ND	ND	ND	80.0	100.0	ND	ND	89.0	
EFFLUENT (MG/L)	ND	ND	ND	ND	38.3	ND	ND	ND	ND	ND	5.8	ND	22.1	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	ND	32.93	ND	ND	ND	ND	ND	4.64	ND	19.67	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	5.0	3.5	ND	ND	5.0	ND	ND	ND	6.8	5.8	ND	ND	5.2	
EFFLUENT (MG/L)	ND	ND	ND	ND	3.6	ND	ND	ND	ND	ND	3.5	ND	3.6	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	3.09	ND	ND	ND	ND	ND	2.80	ND	3.20	

SUMMARY

PARM	CRITERIA	COMPLIFS WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	NA	NA

NO REMEDIAL MEASURES REPORTED

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : MATTAWA
PLANT : MATTAWA LAGOON
WORKS NUMBER : 110000436
TREATMENT : EXFILTRATION LAGOON
:
:
DESIGN CAPACITY : 1.09 (1000 M3)

REGION : NORTHEAST
DISTRICT : NIPPISSING
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : MATTAWA RIVER
MINOR BASIN : OTTAWA RIVER
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 2,686

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.73	1.54	1.45	1.54	1.59	1.57	1.20	ND	1.27	1.18	1.46	1.35	1.44	
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BOD5														
INFLUENT (MG/L)	ND	ND	ND	ND	85.0	ND	ND	ND	ND	ND	ND	ND	85.0	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
SUSPENDED SOLIDS														
INFLUENT (MG/L)	ND	ND	ND	ND	45.0	ND	ND	ND	ND	ND	ND	ND	45.0	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	ND	ND	ND	ND	3.6	ND	ND	ND	ND	ND	ND	ND	3.6	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	NA	NO DIRECT DISCHARGE
SS	NA	NO DIRECT DISCHARGE
TP	NA	NO DIRECT DISCHARGE

NOTE:
BOD - HAS NO CRITERIA
SS - HAS NO CRITERIA
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : MATTICE VAL COTE
PLANT : MATTICE LAGOON
WORKS NUMBER : 1090001791
TREATMENT : CONVENTIONAL LAGOON SEASONAL
:
:
DESIGN CAPACITY : 0.68 (1000 M3)

REGION : NORTHEAST
DISTRICT : COCHRANE
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : MISSINABI RIVER
MINOR BASIN : JAMES BAY
MAJOR BASIN : ARCTIC WATERSHED
POPULATION SERVED : 400

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.28	0.24	0.29	0.46	0.42	0.34	0.64	0.39	0.32	0.36	0.47	0.21	0.37	
LAGOON DISCHARGE	ND	ND	ND	ND	60.40	ND	ND	ND	ND	60.60	ND	ND	60.50	
BOD5														
INFLUENT (MG/L)	68.0	ND	ND	ND	172.0	ND	ND	34.0	34.0	66.0	ND	88.0	77.0	
EFFLUENT (MG/L)	ND	ND	ND	ND	14.0	ND	ND	ND	ND	5.1	ND	ND	9.6	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	ND	5.88	ND	ND	ND	ND	1.83	ND	ND	3.55	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	120.0	ND	ND	ND	90.0	ND	ND	40.0	40.0	110.0	ND	75.0	79.2	
EFFLUENT (MG/L)	ND	ND	ND	ND	22.5	ND	ND	ND	ND	13.3	ND	ND	17.9	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	ND	9.45	ND	ND	ND	ND	4.78	ND	ND	6.62	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	5.4	ND	ND	ND	3.9	ND	ND	4.2	4.2	4.6	ND	4.2	4.4	
EFFLUENT (MG/L)	ND	ND	ND	ND	2.0	ND	ND	ND	ND	1.6	ND	ND	1.8	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	0.84	ND	ND	ND	ND	0.57	ND	ND	0.67	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	NA	NA

NO REMEDIAL MEASURES REPORTED

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : MCGARRY
PLANT : VIRGINIATOWN AND KEARNS WPCP
WORKS NUMBER : 120000024
TREATMENT : COMMUNAL SEPTIC TANK
:
:
DESIGN CAPACITY : 0.72 (1000 M3)

REGION : NORTHEAST
DISTRICT : TIMISKAMING
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : TAILING PD TO LARDER L.
MINOR BASIN : OTTAWA RIVER
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 1,000

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BOD5														
INFLUENT (MG/L)	37.0	31.0	27.0	17.0	18.0	7.0	17.0	18.0	8.0	10.0	20.0	28.0	19.8	
EFFLUENT (MG/L)	19.0	17.0	21.0	8.0	14.0	6.5	14.0	18.0	21.0	8.5	15.0	25.0	15.6	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
PERCENT REMOVAL	49	45	22	53	22	07	18		ND	15	25	11	21*	
PERCENT REMOVAL LIMITS													30	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	50.0	40.0	55.0	35.0	15.0	25.0	9.0	25.0	7.0	15.0	20.0	35.0	27.6	
EFFLUENT (MG/L)	25.0	15.0	25.0	20.0	24.0	65.0	10.0	25.0	20.0	9.0	20.0	40.0	24.8	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
PERCENT REMOVAL	50	63	55	43	ND	ND	ND		ND	40		ND	10*	
PERCENT REMOVAL LIMITS													50	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	1.6	1.6	1.8	1.4	0.9	1.0	0.5	2.0	0.8	0.8	1.2	1.8	1.3	
EFFLUENT (MG/L)	1.4	1.4	1.7	0.9	0.9	0.9	0.5	2.2	1.5	1.0	1.0	1.7	1.3	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	30%	NO
SS	50%	NO
TP	NA	NA

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 CERTIFICATE OF APPROVAL ASSESSMENT

MUNICIPALITY : MISSIPICOTEN
PLANT : WAWA LAGOON
WORKS NUMBER : 110000404
TREATMENT : CONVENTIONAL LAGOON SEASONAL
: PHOSPHORUS REMOVAL CONTINUOUS
:
DESIGN CAPACITY : 4.54 (1000 M3)

REGION : NORTHEAST
DISTRICT : ALGOMA
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : MAGPIE RIVER
MINOR BASIN : SUPERIOR
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 3,800

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	2.70	2.56	2.51	3.74	3.74	2.50	1.97	2.12	2.11	1.97	2.17	2.35	2.54	
LAGOON DISCHARGE	83.60	71.75	77.49	117.32	116.06	74.86	61.07	65.73	63.21	61.21	65.15	72.78	77.52	
BOD5														
INFLUENT (MG/L)	ND	60.0	ND	59.0	103.0	780.0	130.0	69.0	65.0	80.0	140.0	150.0	163.6	
EFFLUENT (MG/L)	ND	5.3	ND	8.4	12.0	2.2	2.6	2.8	3.8	12.0	14.0	3.9	6.7	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	13.56	ND	31.41	44.88	5.50	5.12	5.93	8.01	23.64	30.38	9.16	17.02	
LOADING LIMIT (KG/D)													107.5	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	ND	45.0	ND	85.0	180.0	65.0	40.0	40.0	290.0	55.0	175.0	260.0	123.5	
EFFLUENT (MG/L)	ND	8.0	ND	6.1	22.5	3.0	10.0	3.0	3.0	5.0	11.0	4.0	7.6	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	20.48	ND	22.81	84.15	7.50	19.70	6.36	6.33	9.85	23.87	9.40	19.30	
LOADING LIMIT (KG/D)													129.0	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	ND	2.9	ND	3.2	4.6	3.1	4.2	4.4	3.5	4.2	4.9	5.5	4.1	
EFFLUENT (MG/L)	ND	1.3	ND	0.9	0.9	0.2	0.5	0.6	0.7	0.3	0.7	0.9	0.7	
CONCENTRATION LIMIT (MG/L)													1.0	
LOADING (KG/D)	ND	3.32	ND	3.36	3.36	0.50	0.98	1.27	1.47	0.59	1.51	2.11	1.78	
LOADING LIMIT (KG/D)													4.35	

SUMMARY

PARM	CRITERIA	LOADING	COMPLIES WITH CONC	COMPLIES WITH LOADING
BOD	25.0 MG/L	107.5 KG/D	YES	YES
SS	30.0 MG/L	129.0 KG/D	YES	YES
TP	1.0 MG/L	4.3 KG/D	YES	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED ANNUALLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (E.G. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES

	START DATE	END DATE	ANTICIPATED COMPLIANCE
OPERATIONAL/PROCESS - PHOSPHORUS REMOVAL BEING UPGRADED			

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : MICHIPICOTEN
PLANT : WAWA LAGOON
WORKS NUMBER : 110000454
TREATMENT : CONVENTIONAL LAGOON SEASONAL
: PHOSPHORUS REMOVAL-CONTINUOUS
:
DESIGN CAPACITY : 4.54 (1000 M3)

REGION : NORTHEAST
DISTRICT : ALGOMA
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : MAGPIE RIVER
MINOR BASIN : SUPERIOR
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 3,800

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	2.70	2.56	2.51	3.74	3.74	2.50	1.97	2.12	2.11	1.97	2.17	2.35	2.54	
LAGOON DISCHARGE	83.60	71.75	77.49	117.32	116.06	74.86	61.07	65.73	63.21	61.21	65.15	72.78	77.52	
BOD5														
INFLUENT (MG/L)	ND	60.0	ND	59.0	103.0	780.0	130.0	69.0	65.0	80.0	140.0	150.0	163.6	
EFFLUENT (MG/L)	ND	5.3	ND	8.4	12.0	2.2	2.6	2.8	3.8	12.0	14.0	3.9	6.7	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	13.56	ND	31.41	44.88	5.50	5.12	5.93	8.01	23.64	30.38	9.16	17.02*	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	ND	45.0	ND	85.0	180.0	65.0	40.0	40.0	290.0	55.0	175.0	260.0	123.5	
EFFLUENT (MG/L)	ND	8.0	ND	6.1	22.5	3.0	10.0	3.0	3.0	5.0	11.0	4.0	7.6	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	20.48	ND	22.81	84.15	7.50	19.70	6.36	6.33	9.85	23.87	9.40	19.30*	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	ND	2.9	ND	3.2	4.6	3.1	4.2	4.4	3.5	4.2	4.9	5.5	4.1	
EFFLUENT (MG/L)	ND	1.3*	ND	0.9	0.9	0.2	0.5	0.6	0.7	0.3	0.7	0.9	0.7	1
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	3.32	ND	3.36	3.36	0.50	0.98	1.27	1.47	0.59	1.51	2.11	1.78*	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	1.0 MG/L	NO

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED ANNUALLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES

	START DATE	END DATE	ANTICIPATED COMPLIANCE
OPERATIONAL/PROCESS - PHOSPHORUS REMOVAL BEING UPGRADED			

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : MOONBEAM
PLANT : MOONBEAM LAGOON
WORKS NUMBER : 110000230
TREATMENT : CONVENTIONAL LAGOON SEASONAL
:
:
DESIGN CAPACITY : 0.65 (1000 M3)

REGION : NORTHEAST
DISTRICT : COCHRANE
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : CREEK SYS TO GROUNDHOG R
MINOR BASIN : JAMES BAY
MAJOR BASIN : ARCTIC WATERSHED
POPULATION SERVED : 1,000

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	ND	ND	ND	0.21	0.22	ND	ND	1.12	1.00	ND	2.14	ND	0.94	
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BOD5														
INFLUENT (MG/L)	413.0	185.0	235.0	140.0	64.0	235.0	191.3	125.0	80.0	ND	ND	ND	185.4	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.5	ND	4.5	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	9.63	ND	4.23	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	940.0	130.0	550.0	220.0	85.0	140.0	175.0	145.0	120.0	ND	ND	ND	278.3	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	38.3	ND	38.3	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	81.96	ND	36.00	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	11.5	6.8	7.8	3.1	2.5	4.8	6.0	6.1	3.2	ND	ND	ND	5.8	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.5	ND	1.5	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.21	ND	1.41	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	NA	NA

NO REMEDIAL MEASURES REPORTED

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : MOOSONEE D.A.B.
PLANT : MOOSONEE WPCP (NORTH)
WORKS NUMBER : 120000319
TREATMENT : EXTENDED AERATION
:
:
DESIGN CAPACITY : 0.25 (1000 M3)

REGION : NORTHEAST
DISTRICT : COCHRANE
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : MOOSE RIVER
MINOR BASIN : JAMES BAY
MAJOR BASIN : ARCTIC WATERSHED
POPULATION SERVED : 300

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.26	0.23	0.24	0.20	0.21	0.20	0.20	0.20	0.19	0.18	0.18	0.19	0.21	
BOD5														
INFLUENT (MG/L)	ND	22.0	29.0	24.0	67.0	48.0	39.0	25.0	82.5	ND	91.0	137.0	56.5	
EFFLUENT (MG/L)	3.7	11.1	3.6	2.4	11.2	4.5	6.5	7.6	7.0	ND	4.7	8.5	6.4	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	0.96	2.55	0.86	0.48	2.35	0.90	1.30	1.52	1.33	ND	0.84	1.61	1.34	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	121.0	62.0	71.0	49.0	123.0	115.0	59.0	75.0	209.5	ND	73.0	273.0	111.9	
EFFLUENT (MG/L)	ND	20.3	17.3	11.0	75.5	7.2	9.0	11.0	17.5	ND	8.0	13.4	19.0	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	4.66	4.15	2.20	15.85	1.44	1.80	2.20	3.32	ND	1.44	2.54	3.99	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	ND	2.3	2.2	1.9	3.5	4.1	2.4	2.3	ND	ND	3.8	5.6	3.1	
EFFLUENT (MG/L)	0.4	0.5	0.4	0.3	0.5	0.3	0.6	1.0	ND	ND	0.6	0.9	0.6	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	0.10	0.11	0.09	0.06	0.10	0.06	0.12	0.20	ND	ND	0.10	0.17	0.13	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	NA	NA

NO REMEDIAL MEASURES REPORTED

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : MOOSONEE D.A.B.
PLANT : MOOSONEE WPCP (OLD TOWNSITE)
WORKS NUMBER : 110001060
TREATMENT : CONTACT STABILIZATION
:
:
DESIGN CAPACITY : 0.60 (1000 M3)

REGION : NORTHEAST
DISTRICT : COCHRANE
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : STORE CK TO MOOSE RIVER
MINOR BASIN : JAMES BAY
MAJOR BASIN : ARCTIC WATERSHED
POPULATION SERVED : 1,500

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.55	0.61	0.70	0.78	0.74	0.70	0.74	0.71	0.81	0.88	0.65	0.55	0.70	
BOD5														
INFLUENT (MG/L)	ND	88.0	79.0	117.0	122.0	217.0	118.0	125.0	110.0	ND	91.0	154.0	122.1	
EFFLUENT (MG/L)	12.0	53.2	66.0	21.6	30.0	74.4	27.2	57.3	42.7	ND	6.8	74.0	42.3*	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	6.60	32.45	46.20	16.84	22.20	52.08	20.12	40.68	34.58	ND	4.42	40.70	29.61	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	153.0	205.0	133.0	454.0	100.0	149.0	205.0	217.0	173.0	ND	80.0	130.0	181.7	
EFFLUENT (MG/L)	ND	70.5	89.5	22.0	27.0	150.0	42.5	14.5	13.0	ND	8.0	20.2	45.7*	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	43.00	62.65	17.16	19.98	105.00	31.45	10.29	10.53	ND	5.20	11.11	31.99	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	ND	5.0	5.6	4.9	4.9	8.6	5.6	5.7	ND	ND	3.4	5.2	5.4	
EFFLUENT (MG/L)	2.4	3.2	4.0	1.3	2.2	6.2	1.8	0.6	ND	ND	0.5	2.1	2.4	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	1.32	1.95	2.80	1.01	1.62	4.34	1.33	0.42	ND	ND	0.32	1.15	1.68	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	NO
SS	25.0 MG/L	NO
TP	NA	NA

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES	START DATE	END DATE	ANTICIPATED COMPLIANCE
FACILITY EXPANSION/UPGRADING - ENGINEERING STUDY PHASE	1989/09		

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : NEW LISKEARD
PLANT : NEW LISKEARD LAGOON
WORKS NUMBER : 110000515
TREATMENT : AERATED CELL PLUS LAGOON
: CONTINUOUS DISCHARGE
: PHOSPHORUS REMOVAL-CONTINUOUS
DESIGN CAPACITY : 5.50 (1000 M3)

REGION : NORTHEAST
DISTRICT : TIMISKAMING
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : WABI RIVER
MINOR BASIN : OTTAWA RIVER
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 5,500

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	3.22	3.15	3.92	6.54	5.58	5.29	4.26	4.07	3.41	3.35	4.05	3.32	4.18	
LAGOON DISCHARGE	99.96	88.05	121.54	199.24	172.89	117.98	131.95	126.01	102.43	103.81	122.22	103.02	124.09	
BOD5														
INFLUENT (MG/L)	127.0	132.0	114.0	50.0	55.0	ND	60.0	80.0	105.0	151.0	71.0	140.0	98.6	
EFFLUENT (MG/L)	14.5	23.0	20.5	12.0	9.4	ND	14.0	4.2	3.7	2.3	5.7	3.0	10.2	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	46.69	72.45	80.36	78.48	52.45	ND	59.64	17.09	12.61	7.70	23.08	9.96	42.64	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	144.0	142.0	183.0	75.0	46.0	ND	74.0	140.0	85.0	191.0	90.0	242.0	128.4	
EFFLUENT (MG/L)	10.0	10.0	12.5	10.0	16.3	ND	20.0	2.0	8.0	5.0	6.0	7.0	9.7	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	32.20	31.50	49.00	65.40	90.95	ND	85.20	8.14	27.28	16.75	24.30	23.24	40.55	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.0	6.3	6.6	2.1	3.5	ND	4.7	3.9	5.2	5.9	3.4	6.0	4.9	
EFFLUENT (MG/L)	0.7	1.2*	1.5*	1.5*	0.6	ND	1.7*	2.2*	0.7	0.4	0.4	0.5	1.0	5
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	2.25	3.78	5.88	9.81	3.34	ND	7.24	8.95	2.38	1.34	1.62	1.66	4.18	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	1.0 MG/L	NO

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES

	START DATE	END DATE	ANTICIPATED COMPLIANCE
OPERATIONAL/PROCESS - OPERATIONAL PROCEDURES BEING UPGRADED			

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : NICKEL CENTRE
PLANT : CONISTON WPCP
WORKS NUMBER : 110000123
TREATMENT : OXIDATION DITCH
: CONVENTIONAL ACTIVATED SLUDGE
:
DESIGN CAPACITY : 3.00 (1000 M3)

REGION : NORTHEAST
DISTRICT : SUDBURY, REG. MUN.
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : CONISTON CREEK
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 2,790

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.34	1.31	1.63	3.24	2.13	2.17	0.82	1.45	1.07	1.17	1.51	1.27	1.59	
BOD5														
INFLUENT (MG/L)	105.0	106.0	114.0	39.0	59.0	72.0	ND	109.0	147.0	127.0	113.0	183.0	106.7	
EFFLUENT (MG/L)	11.5	14.0	10.0	20.2	6.4	8.3	ND	10.1	3.8	13.0	10.6	21.0	11.7	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	15.41	18.34	16.30	65.44	13.63	18.01	ND	14.64	4.06	15.21	16.00	26.67	18.60	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	88.0	88.0	87.0	60.0	73.0	72.0	75.0	73.0	117.0	117.0	113.0	125.0	90.7	
EFFLUENT (MG/L)	8.5	8.0	19.0	19.8	5.0	6.1	3.8	10.6	5.5	15.8	5.4	4.0	9.3	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	11.39	10.48	30.97	64.15	10.65	13.23	3.11	15.37	5.88	18.48	8.15	5.08	14.79	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	5.5	4.9	5.3	2.2	3.6	4.3	ND	6.1	6.2	5.3	4.9	5.8	4.9	
EFFLUENT (MG/L)	2.9	3.0	2.6	1.5	1.6	2.3	ND	4.1	4.2	3.2	2.5	3.0	2.8	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	3.88	3.93	4.23	4.86	3.40	4.99	ND	5.94	4.49	3.74	3.77	3.81	4.45	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	NA	NA

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES	START DATE	END DATE	ANTICIPATED COMPLIANCE
EQUIPMENT/MAINTENANCE - NEW EQUIPMENT BEING INSTALLED	1990/08	1991/01	1991/01

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : NICKEL CENTRE
PLANT : FALCONBRIDGE TOWNSITE WPCP
WORKS NUMBER : 120001158
TREATMENT : TRICKLING FILTER
:
:
DESIGN CAPACITY : 0.91 (1000 M3)

REGION : NORTHEAST
DISTRICT : SUDBURY, REG. MUN.
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : FALCON CR.TO CONISTON
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 836

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.59	0.70	0.94	0.65	0.75	0.66	0.63	0.86	0.92	0.92	ND	0.83	0.77	
BOD5														
INFLUENT (MG/L)	87.0	129.0	105.0	86.0	ND	59.0	ND	66.0	230.0	64.0	ND	66.0	99.1	
EFFLUENT (MG/L)	34.5	32.5	37.0	42.0	ND	43.5	ND	36.5	42.0	45.0	ND	34.0	38.6*	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	20.35	22.75	34.78	27.30	ND	28.71	ND	31.39	38.64	41.40	ND	28.22	29.72	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	207.0	117.0	138.0	89.0	78.0	56.0	58.0	69.0	240.0	106.0	ND	42.0	109.1	
EFFLUENT (MG/L)	30.0	37.0	41.0	63.3	51.6	42.5	49.0	33.8	35.0	73.7	ND	30.1	44.3*	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	17.70	25.90	38.54	41.14	38.70	28.05	30.87	29.06	32.20	67.80	ND	24.98	34.11	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	4.9	4.9	6.3	7.6	ND	4.0	ND	11.5	5.7	7.2	ND	4.5	6.3	
EFFLUENT (MG/L)	3.3	3.2	3.4	6.0	ND	3.8	ND	5.1	3.0	3.3	ND	3.2	3.8	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	1.94	2.24	3.19	3.90	ND	2.50	ND	4.38	2.76	3.03	ND	2.65	2.93	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	NO
SS	25.0 MG/L	NO
TP	NA	NA

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES	START DATE	END DATE	ANTICIPATED COMPLIANCE
OPERATIONAL/PROCESS - SAMPLING PROGRAM BEING MODIFIED	1989/04	1990/12	1990/12

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : NICKEL CENTRE
PLANT : GARSON LAGOON (STANDBY)
WORKS NUMBER : 120004807
TREATMENT : CONVENTIONAL LAGOON SEASONAL
:
:
DESIGN CAPACITY : 3.45 (1000 M3)

REGION : NORTHEAST
DISTRICT : SUDBURY, REG. MUN.
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : FLOW TO SUDBURY WPCP
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 4,107

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)			ND	ND	ND	0.59	ND	0.77	0.87	ND	1.13	ND	0.56	
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BOD5														
INFLUENT (MG/L)	ND	ND	ND	163.0	100.0	128.0	ND	48.0	280.0	ND	ND	ND	143.8	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.0	5.0	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.80	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	ND	ND	ND	180.0	120.0	60.0	ND	40.0	100.0	ND	ND	ND	100.0	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	24.0	24.0	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	13.44	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	ND	ND	ND	6.2	7.8	6.5	ND	4.7	9.2	ND	ND	ND	6.9	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.3	2.3	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.29	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	NA	NA

NO REMEDIAL MEASURES REPORTED

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : NICKEL CENTRE
PLANT : WAHNAPITAE LAGOON
WORKS NUMBER : 120003156
TREATMENT : CONVENTIONAL LAGOON SEASONAL
:
:
DESIGN CAPACITY : 1.33 (1000 M3)

REGION : NORTHEAST
DISTRICT : SUDBURY, REG. MUN.
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : WANAPITEI RIVER
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 958

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.60	0.51	1.55	1.08	0.88	0.72	ND	0.73	ND	0.65	ND	0.83	0.84	
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BOD5														
INFLUENT (MG/L)	ND	ND	ND	ND	16.0	24.0	ND	30.0	80.0	ND	ND	ND	37.5	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
SUSPENDED SOLIDS														
INFLUENT (MG/L)	ND	ND	ND	ND	35.0	36.0	ND	83.0	170.0	ND	ND	ND	81.0	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	ND	ND	ND	ND	1.7	1.7	ND	1.7	2.3	ND	ND	ND	1.9	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	NO DIRECT DISCHARGE
SS	40.0 MG/L	NO DIRECT DISCHARGE
TP	NA	NO DIRECT DISCHARGE

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : NORTH BAY
PLANT : NORTH BAY WPCP
WORKS NUMBER : 110000533
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL CONTINUOUS
:
DESIGN CAPACITY : 36.36 (1000 M3)

REGION : NORTHEAST
DISTRICT : NIPPISSING
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : LAKE NIPISSING
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 48,000

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	17.71	20.69	27.66	35.66	32.92	35.31	29.28	31.29	25.40	26.43	33.69	24.58	28.39	
BOD5														
INFLUENT (MG/L)	154.0	130.0	111.0	93.0	113.0	124.0	130.0	172.4	91.0	134.0	237.0	228.0	143.1	
EFFLUENT (MG/L)	7.3	13.6	10.9	3.8	4.0	4.5	5.8	10.3	7.0	8.0	20.5	16.7	9.4	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	129.28	281.38	301.49	135.50	131.68	158.89	169.82	322.28	177.80	211.44	690.64	410.48	266.87	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	248.0	240.0	349.0	252.0	287.0	284.0	547.5	572.3	315.0	312.0	344.0	632.0	365.2	
EFFLUENT (MG/L)	6.9	6.2	13.4	7.7	5.8	5.3	8.3	6.5	6.7	6.6	5.8	5.2	7.0	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	122.19	128.27	370.64	274.58	190.93	187.14	243.02	203.38	170.18	174.43	195.40	127.81	198.73	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	10.7	3.8	8.4	6.5	6.1	5.8	12.6	11.5	4.8	7.7	7.8	9.4	7.9	
EFFLUENT (MG/L)	0.8	1.0	1.0	0.6	0.7	0.7	0.6	0.8	0.9	0.9	0.7	0.6	0.8	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	14.16	20.69	27.66	21.39	23.04	24.71	17.56	25.03	22.86	23.78	23.58	14.74	22.71	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : NORTH HIMSWORTH
PLANT : CALLANDER LAGOON
WORKS NUMBER : 110001747
TREATMENT : CONVENTIONAL LAGOON SEASONAL
: PHOSPHORUS REMOVAL - BATCH
:
DESIGN CAPACITY : 0.47 (1000 M3)

REGION : NORTHEAST
DISTRICT : PARRY SOUND
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : DITCH TO CALLANDER BAY
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 1,220

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.59	0.49	1.13	0.89	0.92	0.83	0.65	0.62	0.53	0.59	0.79	0.63	0.72	
LAGOON DISCHARGE	ND	13.77	ND	26.16	28.36	ND	ND	ND	ND	ND	ND	ND	22.76	
BOD5														
INFLUENT (MG/L)	100.0	119.0	105.0	60.0	106.0	82.0	70.0	65.0	92.0	110.0	108.0	125.0	95.2	
EFFLUENT (MG/L)	ND	15.5	ND	7.0	7.3	ND	ND	ND	ND	ND	ND	ND	9.9	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	7.59	ND	6.23	6.71	ND	ND	ND	ND	ND	ND	ND	7.13	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	125.0	135.0	150.0	93.0	190.0	95.0	60.0	80.0	78.0	150.0	138.0	110.0	117.0	
EFFLUENT (MG/L)	ND	15.0	ND	72.5	11.0	ND	ND	ND	ND	ND	ND	ND	32.8*	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	7.35	ND	64.52	10.12	ND	ND	ND	ND	ND	ND	ND	23.62	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	5.5	6.5	7.0	3.3	4.9	5.9	4.9	5.0	5.4	6.1	4.1	4.9	5.3	
EFFLUENT (MG/L)	ND	2.4*	ND	0.8	1.0	ND	ND	ND	ND	ND	ND	ND	1.4	1
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	1.17	ND	0.71	0.92	ND	ND	ND	ND	ND	ND	ND	1.01	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	NO
TP	1.0 MG/L	NO

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES	START DATE	END DATE	ANTICIPATED COMPLIANCE
FACILITY EXPANSION/UPGRADING - CONSTRUCTION COMPLETE		1989/08	1989/09

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : ONAPING FALLS
PLANT : DOWLING WPCP
WORKS NUMBER : 110003077
TREATMENT : EXTENDED AERATION
:
:
DESIGN CAPACITY : 2.08 (1000 M3)

REGION : NORTHEAST
DISTRICT : SUDBURY, REG. MUN.
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : ONAPING RIVER
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 2,090

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	2.19	2.01	2.12	2.37	2.43	2.32	2.37	2.07	2.12	2.06	1.94	2.00	2.17	
BODS														
INFLUENT (MG/L)	37.0	41.0	69.0	41.0	28.0	29.0	25.0	32.0	32.0	61.0	48.0	53.0	41.3	
EFFLUENT (MG/L)	6.7	7.7	7.9	8.6	9.4	3.7	4.4	2.5	3.5	4.4	4.5	2.9	5.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	14.67	15.47	16.74	20.38	22.84	8.58	10.42	5.17	7.42	9.06	8.73	5.80	11.94	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	31.0	30.0	51.0	37.0	74.0	46.0	35.0	32.0	40.0	53.0	35.0	33.0	41.4	
EFFLUENT (MG/L)	6.0	4.9	6.2	4.8	6.5	5.9	7.0	5.4	5.0	6.0	3.5	2.9	5.3	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	13.14	9.84	13.14	11.37	15.79	13.68	16.59	11.17	10.60	12.36	6.79	5.80	11.50	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	2.1	2.4	3.5	2.3	1.7	2.2	1.6	1.7	2.5	3.5	2.0	2.4	2.3	
EFFLUENT (MG/L)	1.1	1.2	2.3	1.2	1.0	1.2	1.2	1.4	1.2	1.2	1.2	1.1	1.3	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	2.40	2.41	4.87	2.84	2.43	2.78	2.84	2.89	2.54	2.47	2.32	2.20	2.82	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	NA	NA

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES

	START DATE	END DATE	ANTICIPATED COMPLIANCE
COLLECTION SYSTEM - COLLECTION SYSTEM UNDER REVIEW			1991/01

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : ONAPING FALLS
PLANT : LEVACK WPCP
WORKS NUMBER : 120001194
TREATMENT : EXTENDED AERATION
:
:
DESIGN CAPACITY : 1.58 (1000 M3)

REGION : NORTHEAST
DISTRICT : SUDBURY, REG. MUN.
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : ONAPING RIVER
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 2,008

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.46	1.30	1.42	2.07	1.34	1.19	0.88	0.90	0.89	0.85	0.82	0.88	1.17	
BOD5														
INFLUENT (MG/L)	58.0	79.0	77.0	50.0	69.0	101.0	140.0	135.0	225.0	118.0	205.0	132.0	115.8	
EFFLUENT (MG/L)	9.7	5.3	4.1	3.2	5.2	4.2	3.9	3.5	3.4	3.8	5.7	9.3	5.1	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	14.16	6.89	5.82	6.62	6.96	4.99	3.43	3.15	3.02	3.23	4.67	8.18	5.97	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	68.0	51.0	96.0	62.0	91.0	93.0	122.0	113.0	113.0	124.0	99.0	107.0	94.9	
EFFLUENT (MG/L)	5.5	2.9	4.9	3.3	6.0	6.5	6.0	6.7	6.2	6.6	3.4	5.9	5.3	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	8.03	3.77	6.95	6.83	8.04	7.73	5.28	6.03	5.51	5.61	2.78	5.19	6.20	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	3.0	7.7	4.1	2.1	4.1	5.0	5.7	6.4	7.2	5.9	6.7	4.5	5.2	
EFFLUENT (MG/L)	2.3	2.6	2.5	1.3	1.8	2.1	3.4	3.6	3.3	3.7	3.3	3.1	2.8	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	3.35	3.38	3.55	2.69	2.41	2.49	2.99	3.24	2.93	3.14	2.70	2.72	3.28	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	NA	NA

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES	START DATE	END DATE	ANTICIPATED COMPLIANCE
FACILITY EXPANSION/UPGRADING - FINAL DESIGN PHASE	1988	1990/12	1990/12

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : ONAPING FALLS
PLANT : ONAPING WPCP
WORKS NUMBER : 120001149
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
:
:
DESIGN CAPACITY : 0.68 (1000 M3)

REGION : NORTHEAST
DISTRICT : SUDBURY, REG. MUN.
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : SWAMP TO ONAPING RIVER
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 964

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.54	0.54	0.55	0.55	0.54	0.55	0.54	0.54	0.54	0.54	0.57	0.55	0.55	
BOD5														
INFLUENT (MG/L)	67.0	111.0	50.0	70.0	142.0	165.0	105.0	63.0	110.0	70.0	124.0	253.0	110.8	
EFFLUENT (MG/L)	19.0	11.5	7.6	14.0	8.1	4.5	5.5	30.5	ND	ND	9.2	8.5	11.8	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	10.26	6.21	4.18	7.70	4.37	2.47	2.97	16.47	ND	ND	5.24	4.67	6.49	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	81.0	66.0	95.0	93.0	136.0	117.0	110.0	100.0	104.0	91.0	54.0	100.0	95.6	
EFFLUENT (MG/L)	7.0	3.6	6.7	8.6	11.7	11.1	22.1	30.0	13.6	10.5	3.9	4.0	11.1	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	3.78	1.94	3.68	4.73	6.31	6.10	11.93	16.20	7.34	5.67	2.22	2.20	6.11	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	3.7	5.9	3.2	3.9	5.0	11.0	6.1	5.7	7.8	6.5	4.9	5.2	5.7	
EFFLUENT (MG/L)	3.8	3.9	2.7	3.1	3.0	3.3	3.0	3.1	4.2	4.1	2.8	3.2	3.4	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	2.05	2.10	1.48	1.70	1.62	1.81	1.62	1.67	2.26	2.21	1.59	1.76	1.87	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	NA	NA

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES	START DATE	END DATE	ANTICIPATED COMPLIANCE
OPERATIONAL/PROCESS - PHASING OUT EXISTING FACILITY			

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : OPASATIKA
PLANT : OPASATIKA LAGOON
WORKS NUMBER : 120000658
TREATMENT : CONVENTIONAL LAGOON SEASONAL
: PHOSPHORUS REMOVAL - BATCH
:
DESIGN CAPACITY : 1.81 (1000 M3)

REGION : NORTHEAST
DISTRICT : COCHRANE
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : OPASATIKA RIVER
MINOR BASIN : JAMES BAY
MAJOR BASIN : ARCTIC WATERSHED
POPULATION SERVED : 600

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.11	0.11	0.16	0.19	0.17	0.20	0.10	0.13	0.13	0.07	0.15	0.10	0.14	
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BOD5														
INFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	160.0	280.0	ND	220.0	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
SUSPENDED SOLIDS														
INFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	160.0	475.0	ND	317.5	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.0	10.4	ND	7.2	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	NO DISCHARGE
SS	25.0 MG/L	NO DISCHARGE
TP	1.0 MG/L	NO DISCHARGE

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : PARRY SOUND
PLANT : PARRY SOUND WPCP
WORKS NUMBER : 1100000860
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL CONTINUOUS
:
DESIGN CAPACITY : 6.59 (1000 M3)

REGION : NORTHEAST
DISTRICT : PARRY SOUND
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : MC CURRY LAKE
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 5,500

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	6.62	5.16	10.12	12.50	9.02	7.37	5.91	5.24	4.94	5.20	8.34	5.23	7.14	
BOD5														
INFLUENT (MG/L)	97.0	113.0	76.0	85.0	83.0	108.0	145.2	123.3	133.0	151.0	119.0	100.0	111.1	
EFFLUENT (MG/L)	6.8	3.8	2.4	5.3	3.7	6.9	8.6	4.3	3.6	3.4	8.5	6.1	5.3	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	45.01	19.60	24.28	66.25	33.37	50.85	50.82	22.53	17.78	17.68	70.89	31.90	37.84	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	98.0	194.0	96.0	114.0	141.0	148.0	210.8	119.9	144.0	114.0	100.0	111.0	132.6	
EFFLUENT (MG/L)	4.9	4.2	6.2	7.6	3.6	4.7	8.4	3.9	3.9	2.8	5.7	10.6	5.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	32.43	21.67	62.74	95.00	32.47	34.63	49.64	20.43	19.26	14.56	47.53	55.43	39.27	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	2.2	3.4	2.4	2.0	2.3	2.7	3.4	3.2	3.2	3.7	2.6	3.6	2.9	
EFFLUENT (MG/L)	0.3	0.5	0.5	0.4	0.7	0.9	0.8	0.5	0.7	0.4	0.4	0.7	0.6	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	1.98	2.58	5.06	5.00	6.31	6.63	4.72	2.62	3.45	2.08	3.33	3.66	4.28	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : POWASSAN
PLANT : POWASSAN LAGOON
WORKS NUMBER : 110000613
TREATMENT : CONVENTIONAL LAGOON SEASONAL
: PHOSPHORUS REMOVAL - BATCH
: REGULATED DISCHARGE VOLUME
DESIGN CAPACITY : 0.84 (1000 M3)

REGION : NORTHEAST
DISTRICT : PARRY SOUND
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : GENESEE CREEK
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 1,100

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	2.00	0.96	2.14	2.03	1.98	1.87	7.16	1.05	1.02	0.84	1.21	1.05	1.94	
LAGOON DISCHARGE	ND	ND	ND	ND	52.25	33.96	ND	ND	ND	ND	ND	ND	43.11	
BOD5														
INFLUENT (MG/L)	60.0	100.0	58.0	90.0	44.0	72.0	ND	ND	22.0	35.0	44.0	ND	58.3	
EFFLUENT (MG/L)	ND	ND	ND	ND	4.9	5.7	ND	ND	ND	ND	ND	ND	5.3	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	9.70	10.65	ND	ND	ND	ND	ND	ND	10.28	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	85.0	95.0	75.0	75.0	75.0	50.0	ND	ND	15.0	35.0	110.0	ND	68.3	
EFFLUENT (MG/L)	ND	ND	ND	ND	16.0	9.0	ND	ND	ND	ND	ND	ND	12.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	31.68	16.83	ND	ND	ND	ND	ND	ND	24.25	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	3.1	4.1	3.3	8.0	2.7	0.9	ND	ND	2.3	2.1	2.5	ND	3.2	
EFFLUENT (MG/L)	ND	ND	ND	ND	0.4	1.0	ND	ND	ND	ND	ND	ND	0.7	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	ND	0.79	1.87	ND	ND	ND	ND	ND	ND	1.36	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : RATTER & DUNNET
PLANT : WARREN LAGOON
WORKS NUMBER : 110001916
TREATMENT : CONVENTIONAL LAGOON SEASONAL
: PHOSPHORUS REMOVAL BATCH
:
DESIGN CAPACITY : 0.68 (1000 M3)

REGION : NORTHEAST
DISTRICT : SUDBURY DIST.
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : VEUVE RIVER
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 612

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.30	0.25	0.31	0.30	0.29	0.33	0.28	0.28	0.34	0.34	0.28	0.36	0.31	
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BOD5														
INFLUENT (MG/L)	137.0	65.0	62.0	52.0	81.0	112.0	122.5	108.5	61.0	93.0	182.0	72.0	95.7	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
SUSPENDED SOLIDS														
INFLUENT (MG/L)	93.0	75.0	80.0	108.0	68.0	93.0	132.5	60.0	38.0	95.0	135.0	40.0	84.8	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	4.2	2.6	6.7	2.9	4.8	5.1	4.6	4.8	3.0	4.5	3.4	2.1	4.1	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	NO DISCHARGE
SS	25.0 MG/L	NO DISCHARGE
TP	1.0 MG/L	NO DISCHARGE

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : RAYSIDE-BALFOUR
PLANT : AZILDA WPCP
WORKS NUMBER : 110001783
TREATMENT : EXTENDED AERATION
: PHOSPHORUS REMOVAL-CONTINUOUS
:
DESIGN CAPACITY : 2.84 (1000 M3)

REGION : NORTHEAST
DISTRICT : SUDBURY, REG. MUN.
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : WHITSON CREEK
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 4,373

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.61	1.64	2.06	3.89	3.27	2.84	1.59	1.28	1.19	1.33	1.61	1.58	1.99	
BOD5														
INFLUENT (MG/L)	110.0	135.0	113.0	ND	9.0	15.0	36.0	68.0	130.0	139.0	159.0	148.0	96.5	
EFFLUENT (MG/L)	3.3	4.0	2.7	5.8	5.9	2.1	1.7	1.7	6.6	ND	4.9	5.2	4.0	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	5.31	6.56	5.56	22.56	19.29	5.96	2.70	2.17	7.85	ND	7.88	8.21	7.96	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	82.0	76.0	110.0	41.0	31.0	55.0	97.0	75.0	106.0	120.0	127.0	85.0	83.8	
EFFLUENT (MG/L)	6.8	3.6	6.9	19.7	11.5	10.0	5.6	6.1	5.2	7.8	8.7	8.5	8.4	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	10.94	5.90	14.21	76.63	37.60	28.40	8.90	7.80	6.18	10.37	14.00	13.43	16.72	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	4.0	3.2	3.2	1.7	1.0	1.5	2.9	4.3	4.4	3.9	3.9	3.4	3.1	
EFFLUENT (MG/L)	0.2	0.6	0.5	0.5	0.4	0.5	0.6	0.7	ND	0.5	0.7	0.4	0.5	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	0.32	0.98	1.03	1.94	1.30	1.42	0.95	0.89	ND	0.66	1.12	0.63	1.00	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES	START DATE	END DATE	ANTICIPATED COMPLIANCE
COLLECTION SYSTEM - COLLECTION SYSTEM UNDER REVIEW	1990/10	1991/01	1991/01

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : RAYSIDE BALFOUR
PLANT : CHELMSFORD LAGOON
WORKS NUMBER : 120001176
TREATMENT : CONVENTIONAL LAGOON SEASONAL
:
:
DESIGN CAPACITY : 0.87 (1000 M3)

REGION : NORTHEAST
DISTRICT : SUDBURY, REG. MUN.
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : MCKENZIE CREEK
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 8,162

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.10	1.06	1.22	2.99	1.87	2.05	ND	0.97	1.09	1.33	2.00	1.04	1.52	
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	248.55	248.55	
BOD5														
INFLUENT (MG/L)	ND	ND	90.0	44.0	100.0	ND	ND	ND	78.0	110.0	144.0	105.0	95.9	
EFFLUENT (MG/L)	ND	ND	9.0	27.4	17.5	ND	ND	ND	7.0	ND	9.6	9.0	13.3	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	10.98	81.92	32.72	ND	ND	ND	7.63	ND	19.20	9.36	20.22	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	ND	ND	110.0	80.0	120.0	ND	ND	ND	30.0	120.0	188.0	110.0	108.3	
EFFLUENT (MG/L)	ND	ND	7.0	23.0	59.0	ND	ND	ND	8.0	ND	11.0	10.0	19.7	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	8.54	68.77	110.33	ND	ND	ND	8.72	ND	22.00	10.40	29.94	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	ND	ND	4.6	3.3	5.8	ND	ND	ND	4.8	7.0	7.0	6.9	5.6	
EFFLUENT (MG/L)	ND	ND	1.4	3.8	1.8	ND	ND	ND	2.0	ND	3.8	6.4	3.2	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	1.70	11.36	3.36	ND	ND	ND	2.18	ND	7.60	6.65	4.86	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	NA	NA

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES	START DATE	END DATE	ANTICIPATED COMPLIANCE
FACILITY EXPANSION/UPGRADING - REMEDIAL MEASURES BEING EVALUATED	1988	1990/05	1990/05

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : RAYSIDE-BALFOUR
PLANT : CHELMSFORD WPCP
WORKS NUMBER : 120001568
TREATMENT : EXTENDED AERATION
: CONTACT STABILIZATION
: PHOSPHORUS REMOVAL-CONTINUOUS
DESIGN CAPACITY : 3.06 (1000 M3)

REGION : NORTHEAST
DISTRICT : SUDBURY, REG. MUN.
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : WHITSON RIVER
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 4,934

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	3.52	3.57	5.45	7.95	4.63	5.01	2.63	2.50	2.26	2.70	2.92	3.25	3.87	
BOD5														
INFLUENT (MG/L)	83.0	100.0	106.0	34.0	52.0	35.0	157.0	57.0	68.0	120.0	174.0	181.0	97.3	
EFFLUENT (MG/L)	10.5	7.7	7.2	12.0	13.0	5.6	7.4	10.0	4.2	5.4	14.1	8.0	8.8	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	36.96	27.48	39.24	95.40	60.19	28.05	19.46	25.00	9.49	14.58	41.17	26.00	34.06	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	106.0	109.0	133.0	92.0	63.0	77.0	143.0	115.0	140.0	121.0	131.0	206.0	119.7	
EFFLUENT (MG/L)	6.5	7.4	11.9	12.3	13.1	5.7	4.4	7.0	6.4	5.7	5.5	4.2	7.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	22.88	26.41	64.85	97.78	60.65	28.55	11.57	17.50	14.46	15.39	16.06	13.65	29.03	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	3.8	7.5	4.4	3.1	3.0	3.3	4.0	4.0	5.6	4.3	4.1	5.1	4.4	
EFFLUENT (MG/L)	0.2	0.5	0.8	0.9	0.6	0.5	0.6	1.2*	1.3*	0.4	0.4	0.3	0.6	2
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	0.70	1.78	4.36	7.15	2.77	2.50	1.57	3.00	2.93	1.08	1.16	0.97	2.32	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	NO

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES	START DATE	END DATE	ANTICIPATED COMPLIANCE
COLLECTION SYSTEM - COLLECTION SYSTEM UNDER REVIEW	1990/05	1991/01	1991/01
FACILITY EXPANSION/UPGRADING - REMEDIAL MEASURES BEING EVALUATED	1990/05	1991/01	1991/01
FACILITY EXPANSION/UPGRADING - ASSIMILATION STUDY UNDERWAY	1990/05	1991/01	1991/01

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : ROTHERFORD & GEORGE JSL.
PLANT : KILLARNEY LAGOON
PROJ. NUMBER : 1T0002959
TREATMENT : CONVENTIONAL LAGOON SEASONAL
: PHOSPHOROUS REMOVAL - BATCH
:
DESIGN CAPACITY : 0.00 (1000 M3)

REGION : NORTHEAST
DISTRICT : MANITOULIN
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : KILLARNEY CHANNEL
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 505

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	ND	0.11	0.18	0.22	0.16	0.15	0.15	0.15	0.13	0.12	0.11	0.10	0.14	
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BOD5														
INFLUENT (MG/L)	ND	114.0	135.0	37.0	25.0	ND	ND	150.0	120.0	92.0	52.0	ND	90.6	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
SUSPENDED SOLIDS														
INFLUENT (MG/L)	ND	85.0	78.0	ND	30.0	ND	ND	45.0	40.0	80.0	60.0	ND	59.7	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	ND	3.5	4.9	2.6	1.3	ND	ND	7.5	2.6	5.8	4.1	ND	4.0	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	NO DISCHARGE
SS	25.0 MG/L	NO DISCHARGE
TP	1.0 MG/L	NO DISCHARGE

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : SAULT STE MARIE
PLANT : SAULT STE.MARIE WPCP
WORKS NUMBER : 110000640
TREATMENT : PRIMARY
:
:
DESIGN CAPACITY : 54.55 (1000 M3)

REGION : NORTHEAST
DISTRICT : ALGOMA
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : ST MARY'S RIVER
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 80,000

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	22.57	24.31	37.64	72.82	43.06	31.43	32.30	24.09	39.45	25.32	23.83	17.89	32.89	
BOD5														
INFLUENT (MG/L)	318.0	201.0	ND	56.0	56.0	196.0	72.0	116.0	143.5	146.5	97.0	130.0	139.3	
EFFLUENT (MG/L)	69.5	86.5	ND	43.5	27.5	29.2	20.3	37.4	47.0	72.0	60.5	83.3	52.4	
LOADING (KG/D)	1568.61	2102.81	ND	3167.67	1184.15	917.75	655.69	900.96	1854.15	1823.04	1441.71	1490.23	1723.44	
PERCENT REMOVAL	78	57		22	51	85	72	68	67	51	38	36	62	
PERCENT REMOVAL LIMITS													30	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	332.0	146.0	ND	76.0	156.0	137.0	165.0	197.5	202.0	203.0	155.0	150.0	174.5	
EFFLUENT (MG/L)	40.5	56.0	ND	52.0	42.2	24.8	29.8	25.2	39.7	50.5	40.2	53.0	41.3	
LOADING (KG/D)	914.08	1361.36	ND	3786.64	1817.13	779.46	962.54	607.06	1566.16	1278.66	957.96	948.17	1358.36	
PERCENT REMOVAL	88	62		32	73	82	82	87	80	75	74	65	76	
PERCENT REMOVAL LIMITS													50	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.2	3.5	ND	1.7	2.4	3.5	4.5	3.1	5.4	2.3	2.6	2.4	3.4	
EFFLUENT (MG/L)	4.0	2.5	ND	1.0	1.4	3.9	1.3	0.7	1.2	1.0	1.5	1.3	1.8	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	90.28	60.77	ND	72.82	60.28	122.57	41.99	16.86	47.34	25.32	35.74	23.25	59.20	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	30%	YES
SS	50%	YES
TP	NA	NA

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES	START DATE	END DATE	ANTICIPATED COMPLIANCE
OPERATIONAL/PROCESS - START-UP DIFFICULTIES BEING CORRECTED			

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : SAULT STE MARIE
PLANT : WEST END WPCP
WORKS NUMBER : 110002540
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL CONTINUOUS
:
DESIGN CAPACITY : 18.18 (1000 M3)

REGION : NORTHEAST
DISTRICT : ALGOMA
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : ST MARY'S RIVER
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 80,000

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	6.69	5.85	8.89	15.33	7.70	8.29	6.63	6.70	7.19	6.69	8.67	6.19	7.90	
BOD5														
INFLUENT (MG/L)	128.0	216.0	ND	43.0	ND	132.0	ND	293.0	284.5	137.5	215.0	159.0	178.7	
EFFLUENT (MG/L)	12.6	10.5	ND	18.0	ND	7.9	ND	3.9	51.5	21.7	8.3	7.9	15.8	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	84.29	61.42	ND	275.94	ND	65.49	ND	26.13	370.28	145.17	71.96	48.90	124.82	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	212.0	199.0	176.0	80.0	1,630.0	178.0	ND	571.0	281.3	225.0	174.0	143.0	351.8	
EFFLUENT (MG/L)	2.7	4.0	29.3	9.0	15.3	4.8	15.0	11.6	51.0	15.5	9.3	5.0	14.4	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	18.06	23.40	260.47	137.97	117.81	39.79	99.45	77.72	366.69	103.69	80.63	30.95	113.76	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	4.9	5.3	7.1	2.2	5.6	5.5	ND	7.7	7.7	4.1	2.7	3.5	5.1	
EFFLUENT (MG/L)	1.0	0.8	0.7	0.4	0.8	0.7	1.0	0.6	1.3*	0.9	0.6	0.4	0.8	1
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	6.69	4.68	6.22	6.13	6.16	5.80	6.63	4.02	9.34	6.02	5.20	2.47	6.32	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	NO

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES

	START DATE	END DATE	ANTICIPATED COMPLIANCE
EQUIPMENT/MAINTENANCE - EXISTING EQUIPMENT BEING REPAIRED			1989/09

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : SMOOTH ROCK FALLS
PLANT : SMOOTH ROCK FALLS WPCP
WORKS NUMBER : 110002130
TREATMENT : EXTENDED AERATION
:
:
DESIGN CAPACITY : 1.63 (1000 M3)

REGION : NORTHEAST
DISTRICT : COCHRANE
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : MATTAGAMI RIVER
MINOR BASIN : JAMES BAY
MAJOR BASIN : ARCTIC WATERSHED
POPULATION SERVED : 2,251

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.37	1.38	1.57	162.00	2.84	1.69	1.36	1.45	1.34	1.76	1.85	1.19	14.98	
BOD5														
INFLUENT (MG/L)	94.0	61.0	69.0	40.0	7.0	29.0	69.0	48.0	122.0	55.0	62.0	110.0	63.8	
EFFLUENT (MG/L)	3.3	3.9	2.9	2.4	3.4	2.0	1.5	2.2	1.5	2.0	1.8	2.7	2.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	4.52	5.38	4.55	388.80	9.65	3.38	2.04	3.19	2.01	3.52	3.33	3.21	37.45	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	63.0	60.0	70.0	65.0	9.0	20.0	40.0	30.0	73.0	65.0	88.0	140.0	60.3	
EFFLUENT (MG/L)	6.0	6.0	ND	ND	ND	ND	ND	6.0	1.2	6.5	6.0	5.0	5.2	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	8.22	8.28	ND	ND	ND	ND	ND	8.70	1.60	11.44	11.10	5.95	77.90	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	5.6	3.9	193.1	2.2	6.7	3.2	9.4	3.9	5.7	3.5	4.0	6.5	20.6	
EFFLUENT (MG/L)	3.3	3.7	3.2	1.3	0.9	1.8	2.6	2.0	2.7	2.2	1.7	3.4	2.4	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	4.52	5.10	5.02	210.60	2.55	3.04	3.53	2.90	3.61	3.87	3.14	4.04	35.95	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	INSUFFICIENT DATA
TP	NA	NA

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : STURGEON FALLS
PLANT : STURGEON FALLS WPCP
WORKS NUMBER : 110001435
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL CONTINUOUS
:
DESIGN CAPACITY : 4.54 (1000 M3)

REGION : NORTHEAST
DISTRICT : NIPPISSING
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : STURGEON RIVER
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 6,040

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	5.23	5.20	6.71	9.06	7.40	6.13	5.11	5.03	4.46	4.85	5.67	5.20	5.84	
BOD5														
INFLUENT (MG/L)	74.0	75.0	92.0	53.0	60.0	66.0	105.0	65.0	81.0	101.0	88.0	98.0	79.8	
EFFLUENT (MG/L)	4.3	6.0	11.5	4.4	5.2	10.7	3.4	3.1	4.5	3.7	4.3	5.0	5.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	22.48	31.20	77.16	39.86	38.48	65.59	17.37	15.59	20.07	17.94	24.38	26.00	32.12	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	87.0	77.0	115.0	238.0	70.0	95.0	76.7	80.4	78.0	123.0	79.0	96.0	101.3	
EFFLUENT (MG/L)	6.8	6.5	14.7	8.5	7.1	6.2	6.5	5.4	4.7	7.7	4.3	10.8	7.4	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	35.56	33.80	98.63	77.01	52.54	38.00	33.21	27.16	20.96	37.34	24.38	56.16	43.22	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	3.9	3.8	4.2	2.7	2.5	ND	4.4	4.4	4.0	5.1	3.3	4.2	3.9	
EFFLUENT (MG/L)	0.6	0.8	1.1*	0.4	0.4	0.6	1.3*	1.4*	1.3*	0.9	0.6	0.8	0.9	4
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	3.13	4.16	7.38	3.62	2.96	3.67	6.64	7.04	5.79	4.36	3.40	4.16	5.26	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	NO

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES

	START DATE	END DATE	ANTICIPATED COMPLIANCE
OPERATIONAL/PROCESS - MONITORING PROCEDURES BEING UPGRADED			
OPERATIONAL/PROCESS - PROCESS CONTROL BEING UPGRADED			

1989 CERTIFICATE OF APPROVAL ASSESSMENT

MUNICIPALITY : SUDBURY
PLANT : SUDBURY WPCP
WORKS NUMBER : 110000711
TREATMENT : HIGH RATE
:
:
DESIGN CAPACITY : 68.19 (1000 M3)

REGION : NORTHEAST
DISTRICT : SUDBURY, REG. MUN.
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : JUNCTION CREEK
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 95,000

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	58.98	56.67	58.99	84.47	66.71	69.36	55.06	55.54	53.13	53.50	58.13	54.45	60.42	
BOD5														
INFLUENT (MG/L)	91.0	76.0	71.0	34.0	46.0	61.0	73.0	64.0	84.0	77.0	79.0	96.0	71.0	
EFFLUENT (MG/L)	24.0	26.5	13.3	9.8	3.6	9.8	8.6	4.8	3.9	9.0	36.0	39.5	15.7	
CONCENTRATION LIMIT (MG/L)													20.0	
LOADING (KG/D)	1415.52	1501.75	784.56	827.80	240.15	679.72	473.51	266.59	207.20	481.50	2092.68	2150.77	948.59	
LOADING LIMIT (KG/D)														
SUSPENDED SOLIDS														
INFLUENT (MG/L)	61.0	64.0	83.0	61.0	57.0	71.0	61.0	51.0	72.0	69.0	85.0	75.0	67.5	
EFFLUENT (MG/L)	10.9	10.3	10.4	14.1	10.9	11.2	10.1	12.0	9.5	17.9	10.0	21.5	12.4	
CONCENTRATION LIMIT (MG/L)													20.0	
LOADING (KG/D)	642.88	583.70	613.49	1191.02	727.13	776.83	556.10	666.48	504.73	957.65	581.30	1170.67	749.21	
LOADING LIMIT (KG/D)														
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	2.7	3.6	2.7	1.8	2.1	1.9	2.0	2.5	2.0	3.0	2.7	3.1	2.5	
EFFLUENT (MG/L)	1.0	0.9	0.9	0.5	0.6	0.5	0.6	0.7	0.9	0.8	0.8	1.0	0.8	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	58.98	51.00	53.09	42.23	40.02	34.68	33.03	38.87	47.81	42.80	46.50	54.45	48.34	
LOADING LIMIT (KG/D)														

SUMMARY

PARM	CRITERIA	LOADING	COMPLIES WITH CONC	COMPLIES WITH LOADING
BOD	20.0 MG/L	NA	YES	NA
SS	20.0 MG/L	NA	YES	NA
TP	NA	NA	NA	NA

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES

	START DATE	END DATE	ANTICIPATED COMPLIANCE
FACILITY EXPANSION/UPGRADING - REMEDIAL MEASURES BEING EVALUATED	1990/08	1991/01	1991/01

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : SUDBURY
PLANT : SUDBURY WPCP
WORKS NUMBER : 110000711
TREATMENT : HIGH RATE
:
:
DESIGN CAPACITY : 68.19 (1000 M3)

REGION : NORTHEAST
DISTRICT : SUDBURY, REG. MUN.
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : JUNCTION CREEK
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 95,000

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	58.98	56.67	58.99	84.47	66.71	69.36	55.06	55.54	53.13	53.50	58.13	54.45	60.42	
BOD														
INFLUENT (MG/L)	91.0	76.0	71.0	34.0	46.0	61.0	73.0	64.0	84.0	77.0	79.0	96.0	71.0	
EFFLUENT (MG/L)	24.0	26.5	13.3	9.8	3.6	9.8	8.6	4.8	3.9	9.0	36.0	39.5	15.7	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	1415.52	1501.75	784.56	827.80	240.15	679.72	473.51	266.59	207.20	481.50	2092.68	2150.77	948.59	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	61.0	64.0	83.0	61.0	57.0	71.0	61.0	51.0	72.0	69.0	85.0	75.0	67.5	
EFFLUENT (MG/L)	10.9	10.3	10.4	14.1	10.9	11.2	10.1	12.0	9.5	17.9	10.0	21.5	12.4	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	642.88	583.70	613.49	1191.02	727.13	776.83	556.10	666.48	504.73	957.65	581.30	1170.67	749.21	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	2.7	3.6	2.7	1.8	2.1	1.9	2.0	2.5	2.0	3.0	2.7	3.1	2.5	
EFFLUENT (MG/L)	1.0	0.9	0.9	0.5	0.6	0.5	0.6	0.7	0.9	0.8	0.8	1.0	0.8	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	58.98	51.00	53.09	42.23	40.02	34.68	33.03	38.87	47.81	42.80	46.50	54.45	48.34	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	NA	NA

NOTE :
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES	START DATE	END DATE	ANTICIPATED COMPLIANCE
FACILITY EXPANSION/UPGRADING - REMEDIAL MEASURES BEING EVALUATED	1990/08	1991/01	1991/01

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : SUNDRIDGE
PLANT : SUNDRIDGE LAGOON
WORKS NUMBER : 110001961
TREATMENT : CONVENTIONAL LAGOON SEASONAL
: PHOSPHORUS REMOVAL - BATCH
:
DESIGN CAPACITY : 0.65 (1000 M3)

REGION : NORTHEAST
DISTRICT : PARRY SOUND
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : BERNARD CREEK
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 740

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.46	0.45	0.55	0.70	0.63	0.61	0.53	0.49	0.44	0.44	0.50	0.46	0.52	
LAGOON DISCHARGE	ND	ND	ND	ND	77.89	98.14	ND	ND	ND	ND	ND	ND	88.02	
BOD5														
INFLUENT (MG/L)	55.0	131.0	ND	52.0	22.0	70.0	140.0	205.0	120.0	89.0	ND	ND	98.2	
EFFLUENT (MG/L)	ND	ND	ND	ND	6.1	8.6	ND	ND	ND	ND	ND	ND	7.4	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	3.84	5.24	ND	ND	ND	ND	ND	ND	3.85	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	50.0	55.0	ND	60.0	20.0	45.0	55.0	110.0	65.0	68.0	ND	ND	58.7	
EFFLUENT (MG/L)	ND	ND	ND	ND	25.0	18.8	ND	ND	ND	ND	ND	ND	21.9	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	15.75	11.46	ND	ND	ND	ND	ND	ND	11.39	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.6	6.5	ND	6.2	1.9	1.2	7.5	10.4	5.8	5.4	ND	ND	5.7	
EFFLUENT (MG/L)	ND	ND	ND	ND	1.0	0.8	ND	ND	ND	ND	ND	ND	0.9	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	ND	0.63	0.48	ND	ND	ND	ND	ND	ND	0.47	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NO REMEDIAL MEASURES REPORTED

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : TEMAGAMI
PLANT : NORTH GOWARD LAGOON
WORKS NUMBER : 120000783
TREATMENT : AERATED CELL PLUS LAGOON
: REGULATED DISCHARGE VOLUME
: EFFLUENT POLISHING
DESIGN CAPACITY : 0.59 (1000 M3)

REGION : NORTHEAST
DISTRICT : NIPPISSING
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : NET LAKE
MINOR BASIN : OTTAWA RIVER
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 350

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.03	0.31	0.51	0.06	0.33	0.41	0.39	0.35	0.20	0.17	0.20	0.19	0.26	
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BOD5														
INFLUENT (MG/L)	52.0	35.0	82.0	22.0	30.0	22.0	22.0	114.0	36.0	41.0	140.0	155.0	62.6	
EFFLUENT (MG/L)	6.5	6.5	6.8	8.0	16.0	8.5	ND	41.0	4.2	33.0	19.0	4.5	14.0	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	0.19	2.01	3.46	0.48	5.28	3.48	ND	14.35	0.84	5.61	3.80	0.85	3.64	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	30.0	30.0	60.0	75.0	70.0	8.0	30.0	75.0	50.0	ND	150.0	420.0	90.7	
EFFLUENT (MG/L)	3.0	5.0	5.0	10.0	20.0	10.0	10.0	50.0	8.0	25.0	35.0	20.0	16.8	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	0.09	1.55	2.55	0.60	6.60	4.10	3.90	17.50	1.60	4.25	7.00	3.80	4.37	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	2.5	4.6	2.2	1.4	1.9	1.8	1.8	7.1	4.0	2.3	5.6	3.5	3.2	
EFFLUENT (MG/L)	2.4	3.1	3.2	0.9	1.3	1.0	1.0	2.4	1.9	2.2	2.8	0.7	1.9	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	0.07	0.96	1.63	0.05	0.42	0.41	0.39	0.84	0.38	0.37	0.56	0.13	0.49	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	NA	NA

NO REMEDIAL MEASURES REPORTED

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : TEMAGAMI
PLANT : TEMAGAMI LAGOON
WORKS NUMBER : 110002327
TREATMENT : CONVENTIONAL LAGOON SEASONAL
: PHOSPHORUS REMOVAL - BATCH
:
DESIGN CAPACITY : 0.11 (1000 M3)

REGION : NORTHEAST
DISTRICT : NIPPISSING
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : SNAKE ISLAND LAKE
MINOR BASIN : OTTAWA RIVER
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 440

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BOD5														
INFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
SUSPENDED SOLIDS														
INFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	NO DISCHARGE
SS	25.0 MG/L	NO DISCHARGE
TP	1.0 MG/L	NO DISCHARGE

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES	START DATE	END DATE	ANTICIPATED COMPLIANCE
FACILITY EXPANSION/UPGRADING - FINAL DESIGN PHASE	1989/04		

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : THESSALON
PLANT : THESSALON LAGOON
WORKS NUMBER : 1100002454
TREATMENT : CONVENTIONAL LAGOON SEASONAL
:
:
DESIGN CAPACITY : 1.23 (1000 M3)

REGION : NORTHEAST
DISTRICT : ALGOMA
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : THESSALON RIVER
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 1,600

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.08	1.09	1.23	1.92	1.33	1.12	1.17	1.14	1.02	1.01	1.03	0.95	1.17	
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	345.00	ND	345.00	
BOD5														
INFLUENT (MG/L)	53.0	42.0	40.0	32.0	49.0	30.0	11.0	17.0	50.0	24.0	40.0	ND	35.3	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8.1	ND	8.1	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8.34	ND	9.48	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	29.0	45.0	33.0	50.0	45.0	25.0	20.0	40.0	100.0	30.0	50.0	ND	42.5	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	9.2	ND	9.2	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	9.47	ND	10.76	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	2.5	4.5	2.6	2.9	2.7	6.4	2.4	2.5	3.1	3.2	3.5	ND	3.3	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.8	ND	1.8	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.85	ND	2.11	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	NA	NA

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : TIMMINS
PLANT : BOB'S LAKE LAGOON
WORKS NUMBER : 120000275
TREATMENT : CONVENTIONAL LAGOON CONTINUOUS
:
:
DESIGN CAPACITY : 0.58 (1000 M3)

REGION : NORTHEAST
DISTRICT : COCHRANE
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : BOB'S CK TO PORCUPINE L.
MINOR BASIN : JAMES BAY
MAJOR BASIN : ARCTIC WATERSHED
POPULATION SERVED : 170

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BOD5														
INFLUENT (MG/L)	255.0	860.0	150.0	62.0	54.0	96.0	95.0	84.0	40.0	34.0	100.0	ND	166.4	
EFFLUENT (MG/L)	49.0	70.0	84.0	54.0	15.0	12.0	11.0	23.0	13.0	8.4	16.0	ND	32.3*	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
SUSPENDED SOLIDS														
INFLUENT (MG/L)	300.0	2,160.0	37.0	110.0	100.0	260.0	95.0	130.0	60.0	60.0	140.0	ND	313.8	
EFFLUENT (MG/L)	35.0	25.0	30.0	25.0	20.0	50.0	4.0	20.0	10.0	7.0	25.0	ND	22.8	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	13.7	26.0	15.0	3.7	5.7	5.3	4.1	5.2	3.4	4.9	3.2	ND	8.2	
EFFLUENT (MG/L)	6.3	7.0	8.3	4.7	2.0	2.5	2.1	2.2	3.6	3.5	3.5	ND	4.2	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	NO
SS	40.0 MG/L	YES
TP	NA	NA

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES

	START DATE	END DATE	ANTICIPATED COMPLIANCE
NO ACTION - FUNDING APPLICATION REJECTED			1992

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : TIMMINS
PLANT : MATTAGAMI WPCP
WORKS NUMBER : 110000766
TREATMENT : PRIMARY
:
:
DESIGN CAPACITY : 34.09 (1000 M3)

REGION : NORTHEAST
DISTRICT : COCHRANE
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : MATTAGAMI RIVER
MINOR BASIN : JAMES BAY
MAJOR BASIN : ARCTIC WATERSHED
POPULATION SERVED : 33,000

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	15.60	15.00	17.00	26.20	29.20	24.00	21.30	24.10	18.60	18.40	19.30	15.60	20.36	
BOD5														
INFLUENT (MG/L)	80.0	98.0	98.0	72.0	62.0	56.0	27.0	46.0	66.0	72.0	84.0	128.0	74.1	
EFFLUENT (MG/L)	78.0	68.0	67.0	24.0	30.0	43.0	30.0	13.0	15.0	41.0	32.0	67.0	42.3	
LOADING (KG/D)	1216.80	1020.00	1139.00	628.80	876.00	1032.00	639.00	313.30	279.00	754.40	617.60	1045.20	861.23	
PERCENT REMOVAL	03	31	32	67	52	23	ND	72	77	43	62	48	43	
PERCENT REMOVAL LIMITS													30	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	127.0	191.0	157.0	113.0	167.0	132.0	180.0	104.0	172.0	163.0	191.0	159.0	154.7	
EFFLUENT (MG/L)	54.5	40.6	43.0	27.0	45.2	39.3	33.5	28.2	38.3	40.3	55.0	41.1	40.5	
LOADING (KG/D)	850.20	609.00	731.00	707.40	1319.84	943.20	713.55	679.62	712.38	741.52	1061.50	641.16	824.58	
PERCENT REMOVAL	57	79	73	76	73	70	81	73	78	75	71	74	74	
PERCENT REMOVAL LIMITS													50	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	4.2	5.1	7.2	3.6	4.9	3.8	3.7	2.9	4.2	4.2	41.0	4.7	7.5	
EFFLUENT (MG/L)	3.7	3.1	3.8	1.1	ND	ND	1.1	7.3	0.7	1.1	7.3	2.4	3.2	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	57.72	46.50	64.60	28.82	ND	ND	23.43	175.93	13.02	20.24	140.89	37.44	65.15	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	30%	YES
SS	50%	YES
TP	NA	NA

NO REMEDIAL MEASURES REPORTED

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : TIMMINS
PLANT : WHITNEY & TISDALE WPCP
WORKS NUMBER : 110001391
TREATMENT : CONTACT STABILIZATION
:
:
DESIGN CAPACITY : 6.81 (1000 M3)

REGION : NORTHEAST
DISTRICT : COCHRANE
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : PORCUPINE RIVER
MINOR BASIN : JAMES BAY
MAJOR BASIN : ARCTIC WATERSHED
POPULATION SERVED : 7,300

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	2.66	2.55	3.29	7.03	6.44	4.93	3.66	4.63	3.39	3.52	4.08	2.67	4.07	
BOD5														
INFLUENT (MG/L)	56.0	92.0	82.0	114.0	56.0	80.0	24.0	32.0	115.0	84.0	82.0	94.0	75.9	
EFFLUENT (MG/L)	16.0	13.0	13.0	8.6	9.8	3.2	1.6	9.2	7.0	2.5	3.0	14.0	8.4	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	42.56	33.15	42.77	60.45	63.11	15.77	5.85	42.59	23.73	8.80	12.24	37.38	34.19	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	50.0	50.0	90.0	150.0	90.0	95.0	15.0	40.0	65.0	100.0	150.0	70.0	80.4	
EFFLUENT (MG/L)	15.0	10.0	10.0	10.0	15.0	10.0	7.0	7.0	8.0	5.2	8.0	7.0	9.4	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	39.90	25.50	32.90	70.30	96.60	49.30	25.62	32.41	27.12	18.30	32.64	18.69	38.26	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	3.4	4.5	6.4	4.9	3.4	4.6	2.2	2.0	4.4	6.6	4.6	6.2	4.4	
EFFLUENT (MG/L)	8.0	4.1	7.3	2.0	1.5	2.3	1.8	2.6	2.4	3.6	3.0	3.9	3.5	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	21.28	10.45	24.01	14.06	9.66	11.33	6.58	12.03	8.13	12.67	12.24	10.41	14.25	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	NA	NA

NO REMEDIAL MEASURES REPORTED

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : VA. RITA HARTY
PLANT : HARTY LAGOON
WORKS NUMBER : 120003316
TREATMENT : CONVENTIONAL LAGOON SEASONAL
: PHOSPHORUS REMOVAL - BATCH
:
DESIGN CAPACITY : 0.09 (1000 M3)

REGION : NORTHEAST
DISTRICT : COCHRANE
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : NO NAME CREEK
MINOR BASIN : JAMES BAY
MAJOR BASIN : ARCTIC WATERSHED
POPULATION SERVED : 140

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
LAGOON DISCHARGE	ND	ND	ND	ND	10.20	ND	ND	ND	ND	ND	ND	ND	10.20	
BOD5														
INFLUENT (MG/L)	110.0	165.0	220.0	130.0	135.0	80.0	ND	285.0	180.0	143.0	125.0	225.0	163.5	
EFFLUENT (MG/L)	ND	ND	ND	ND	5.4	ND	ND	ND	ND	3.2	ND	ND	4.3	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
SUSPENDED SOLIDS														
INFLUENT (MG/L)	140.0	130.0	130.0	130.0	130.0	95.0	ND	200.0	160.0	340.0	270.0	130.0	168.6	
EFFLUENT (MG/L)	ND	ND	ND	ND	15.0	ND	ND	ND	ND	14.7	ND	ND	14.9	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	7.7	7.5	12.0	4.8	5.2	3.9	ND	25.5	7.3	6.6	4.7	6.2	8.3	
EFFLUENT (MG/L)	ND	ND	ND	ND	2.0*	ND	ND	ND	ND	0.6	ND	ND	1.3	1
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	NO

NO REMEDIAL MEASURES REPORTED

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : VAL-RITA-HARTY
PLANT : VAL-RITA LAGOON
WORKS NUMBER : 110002318
TREATMENT : CONVENTIONAL LAGOON SEASONAL
: PHOSPHORUS REMOVAL - BATCH
:
DESIGN CAPACITY : 0.53 (1000 M3)

REGION : NORTHEAST
DISTRICT : COCHRANE
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : UNNAMED CK.TO KAPUSK.RIV
MINOR BASIN : JAMES BAY
MAJOR BASIN : ARCTIC WATERSHED
POPULATION SERVED : 580

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
LAGOON DISCHARGE	ND	ND	ND	ND	10.20	ND	ND	ND	ND	ND	ND	ND	10.20	
BOD5														
INFLUENT (MG/L)	165.0	100.0	275.0	22.0	ND	44.0	ND	90.0	150.0	116.0	240.0	245.0	144.7	
EFFLUENT (MG/L)	ND	ND	ND	ND	6.7	ND	ND	ND	ND	1.3	ND	ND	4.0	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
SUSPENDED SOLIDS														
INFLUENT (MG/L)	180.0	420.0	340.0	55.0	ND	90.0	ND	110.0	120.0	260.0	340.0	330.0	224.5	
EFFLUENT (MG/L)	ND	ND	ND	ND	16.7	ND	ND	ND	ND	5.5	ND	ND	11.1	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	7.1	5.1	9.8	2.0	ND	3.2	ND	5.6	6.5	6.7	8.0	7.7	6.2	
EFFLUENT (MG/L)	ND	ND	ND	ND	0.5	ND	ND	ND	ND	0.1	ND	ND	0.3	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : VALLEY EAST
PLANT : HANNEVAL CARONEVAL THERESE WPCP
WORKS NUMBER : 1100015941
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHOROUS REMOVAL CONTINUOUS
:
DESIGN CAPACITY : 11.36 (1000 M3)

REGION : NORTHEAST
DISTRICT : SUDBURY, REG. MUN.
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : VERMILION RIVER
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 17,337

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	7.87	7.35	8.11	16.83	9.89	10.00	5.12	5.17	5.19	6.00	6.77	5.54	7.82	
BOD5														
INFLUENT (MG/L)	100.0	132.0	127.0	36.0	64.0	49.0	ND	79.0	172.0	95.0	135.0	137.0	102.4	
EFFLUENT (MG/L)	5.8	5.5	4.7	10.9	13.0	18.2	ND	7.8	13.3	7.0	15.8	10.6	10.2	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	45.64	40.42	38.11	183.44	128.57	182.00	ND	40.32	69.02	42.00	106.96	58.72	79.76	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	155.0	154.0	135.0	98.0	106.0	110.0	101.0	129.0	176.0	155.0	147.0	102.0	130.7	
EFFLUENT (MG/L)	3.2	2.7	4.0	15.6	9.5	6.8	4.7	4.4	5.2	6.4	4.8	2.4	5.8	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	25.18	19.84	32.44	262.54	93.95	68.00	24.06	22.74	26.98	38.40	32.49	13.29	45.36	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	4.3	5.0	6.2	3.5	3.8	3.8	5.6	5.7	5.7	5.7	4.0	4.0	4.8	
EFFLUENT (MG/L)	0.5	0.5	0.5	0.8	0.5	0.5	0.8	0.9	0.8	0.5	0.6	0.6	0.6	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	3.93	3.67	4.05	13.46	4.94	5.00	4.09	4.65	4.15	3.00	4.06	3.32	4.69	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NO REMEDIAL MEASURES REPORTED

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : WALDEN
PLANT : LIVELY WPCP
WORKS NUMBER : 120001185
TREATMENT : EXTENDED AERATION
:
:
DESIGN CAPACITY : 1.59 (1000 M3)

REGION : NORTHEAST
DISTRICT : SUDBURY, REG. MUN.
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : MEATBIRD CREEK
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 3,669

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.32	1.18	1.42	1.81	1.65	1.70	1.37	1.53	1.33	1.36	1.57	1.50	1.48	
BOD5														
INFLUENT (MG/L)	168.0	119.0	120.0	56.0	65.0	63.0	65.0	86.0	87.0	468.0	91.0	60.0	120.7	
EFFLUENT (MG/L)	7.3	6.1	9.6	8.1	7.9	3.5	2.3	15.9	3.0	5.5	15.7	11.0	8.0	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	9.63	7.19	13.63	14.66	13.03	5.95	3.15	24.32	3.99	7.48	24.64	16.50	11.84	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	126.0	111.0	121.0	83.0	112.0	124.0	82.0	100.0	122.0	384.0	136.0	134.0	136.3	
EFFLUENT (MG/L)	3.6	2.1	8.9	7.7	5.5	2.6	2.6	2.7	5.7	10.2	9.5	7.3	5.7	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	4.75	2.47	12.63	13.93	9.07	4.42	3.56	4.13	7.58	13.87	14.91	10.95	8.44	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	5.6	7.1	5.7	3.3	5.0	3.5	4.5	5.7	6.6	9.4	5.7	2.7	5.4	
EFFLUENT (MG/L)	3.3	3.9	2.7	1.4	2.6	2.6	3.1	3.0	3.3	3.2	2.7	3.1	2.9	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	4.35	4.60	3.83	2.53	4.29	4.42	4.24	4.59	4.38	4.35	4.23	4.65	4.29	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	NA	NA

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES	START DATE	END DATE	ANTICIPATED COMPLIANCE
OPERATIONAL/PROCESS - PHOSPHORUS REMOVAL BEING UPGRADED	1990/10	1991/01	1991/04

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : WALDEN
PLANT : NIKKOLA WPCP
WORKS NUMBER : 1200001551
TREATMENT : EXTENDED AERATION
DESIGN CAPACITY : 4.36 (1000 M3)

REGION : NORTHEAST
DISTRICT : SUDBURY, REG. MUN.
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : JUNCTION CREEK
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 2,693

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.77	1.72	2.52	3.09	1.94	1.84	1.33	1.33	1.34	1.33	1.60	2.25	1.84	
BOD5														
INFLUENT (MG/L)	49.0	64.0	44.0	21.0	34.0	52.0	70.0	84.0	95.0	86.0	180.0	81.0	71.7	
EFFLUENT (MG/L)	9.0	12.0	12.5	6.2	5.6	4.8	2.6	7.0	2.1	3.4	8.3	5.3	6.6	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	15.93	20.64	31.50	19.15	10.86	8.83	3.45	9.31	2.81	4.52	13.28	11.92	12.14	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	74.0	94.0	68.0	59.0	74.0	95.0	120.0	121.0	126.0	158.0	103.0	65.0	96.4	
EFFLUENT (MG/L)	7.3	10.0	13.5	8.6	5.2	3.8	4.3	6.6	7.3	11.5	18.4	11.6	9.0	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	12.92	17.20	34.02	26.57	10.08	6.99	5.71	8.77	9.78	15.29	29.44	26.10	16.56	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	3.6	4.6	2.9	1.4	3.1	4.1	6.3	5.8	6.7	7.8	3.6	4.3	4.5	
EFFLUENT (MG/L)	3.1	3.5	2.1	1.3	2.6	2.8	4.0	4.6	1.4	1.1	1.0	0.7	2.4	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	5.48	6.02	5.29	4.01	5.04	5.15	5.32	6.11	1.87	1.46	1.60	1.57	4.42	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	NA	NA

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES	START DATE	END DATE	ANTICIPATED COMPLIANCE
OPERATIONAL/PROCESS - PHOSPHORUS REMOVAL BEING UPGRADED	1989/09	1990/04	1990/04

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : WEBBWOOD
PLANT : WEBBWOOD LAGOON
WORKS NUMBER : 110001881
TREATMENT : CONVENTIONAL LAGOON SEASONAL
:
:
DESIGN CAPACITY : 0.34 (1000 M3)

REGION : NORTHEAST
DISTRICT : SUDBURY DIST.
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : GOUGH CREEK
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 460

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.10	0.10	0.16	0.17	0.11	0.12	0.10	0.09	0.10	0.09	0.09	0.09	0.11	
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BOD5														
INFLUENT (MG/L)	165.0	183.0	73.0	51.0	81.0	143.0	108.0	190.0	155.0	124.0	190.0	365.0	152.3	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	9.2	7.0	1.2	12.3	27.0	ND	11.3	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	0.92	0.63	0.12	1.10	2.43	ND	1.24	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	103.0	145.0	85.0	53.0	63.0	93.0	53.0	100.0	65.0	113.0	130.0	160.0	96.9	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	10.5	15.0	10.0	37.5	30.0	ND	20.6	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	1.05	1.35	1.00	3.37	2.70	ND	2.27	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	8.4	15.5	5.5	4.4	7.7	11.5	7.2	15.1	10.2	10.2	11.8	14.4	10.2	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	5.4	5.0	5.8	3.9	2.5	ND	4.5	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	0.54	0.45	0.58	0.35	0.22	ND	0.50	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	NA	NA

NO REMEDIAL MEASURES REPORTED

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : WHITE RIVER
PLANT : WHITE RIVER LAGOON
WORKS NUMBER : 110002522
TREATMENT : CONVENTIONAL LAGOON SEASONAL
:
:
DESIGN CAPACITY : 0.00 (1000 M3)

REGION : NORTHEAST
DISTRICT : ALGOMA
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : SMALL CR.TO WHITE RIVER
MINOR BASIN : SUPERIOR
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 1,000

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.64	0.62	0.59	0.55	0.84	0.60	0.50	0.56	0.63	0.59	0.69	0.67	0.62	
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BOD5														
INFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
SUSPENDED SOLIDS														
INFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	NO DISCHARGE
SS	40.0 MG/L	NO DISCHARGE
TP	NA	NO DISCHARGE

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

James Bay
KENORA
THUNDER BAY
Lake Superior

Northwestern Region 6

Ministry of the Environment
Ontario

REGIONAL OFFICE

Thunder Bay
435 James St. South
P.O. Box 5000
P7C 5G8
(807) 475-1205

DISTRICT OFFICES

Kenora
808 Robertson St.
P9N 1X9
(807) 468-5578

Thunder Bay
435 James St. South
P.O. Box 5000
P7C 5G8
(807) 475-1315

NORTHWEST SUMMARY - 1989

Treatment Type	Number			Design Capacity (1000M3/D)		
	Min	Mun	Tot	Ministry	Municipal	Total
Primary	1	3	4	9.09	112.01	121.11
Conventional Activated Sludge	0	1	1	-	2.27	2.27
Contact Stabilization	1	2	3	2.45	25.00	27.45
Extended Aeration	10	1	11	23.13	0.55	23.68
Communal Septic Tank	1	0	1	0.27	-	0.27
Aerated Lagoon	0	1	1	-	4.10	4.10
Conventional Lagoon Seasonal	3	0	3	2.03	-	2.03
Exfiltration Lagoon	1	2	3	1.36	1.36	2.72
TOTALS	17	10	27	38.33	145.29	183.62

1000M3/D: Thousands of cubic meters per day
ADF: Average Daily Flow

NORTHWEST SUMMARY - 1989

Treatment Type	Number			Annual ADF (1000M3/D)		
	Min	Mun	Tot	Ministry	Municipal	Total
Primary	1	3	3	7.35	80.71	88.06
Conventional Activated Sludge	0	1	1	0.00	1.78	1.78
Contact Stabilization	1	2	3	2.10	14.99	17.09
Extended Aeration	10	1	11	14.16	0.26	14.42
Communal Septic Tank	1	0	1	0.10	0.00	0.10
Aerated Lagoon	0	1	1	0.00	3.08	3.08
Conventional Lagoon Seasonal	3	0	3	1.63	0.00	1.63
Exfiltration Lagoon	1	2	3	0.24	0.00	0.24
TOTALS	17	10	27	25.58	100.82	126.40

1000M3/D: Thousands of cubic meters per day
ADF: Average Daily Flow

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : ATIKOKAN
PLANT : ATIKOKAN WPCP
WORKS NUMBER : 110001523
TREATMENT : EXTENDED AERATION
: PHOSPHORUS REMOVAL-CONTINUOUS
:
DESIGN CAPACITY : 4.08 (1000 M3)

REGION : NORTHWEST
DISTRICT : RAINY RIVER
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : ATIKOKAN RIVER
MINOR BASIN : LAKE WINNIPEG EAST
MAJOR BASIN : NELSON RIVER
POPULATION SERVED : 4,500

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	2.42	2.68	2.95	4.89	3.25	3.39	2.79	2.56	3.07	2.56	2.12	1.94	2.89	
BOD5														
INFLUENT (MG/L)	70.0	65.0	62.0	52.0	44.0	38.0	65.0	45.0	69.0	45.0	80.0	112.0	62.3	
EFFLUENT (MG/L)	3.5	8.7	7.7	2.6	3.2	2.0	1.5	5.2	1.9	2.0	2.2	8.7	4.1	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	8.47	23.31	22.71	12.71	10.40	6.78	4.18	13.31	5.83	5.12	4.66	16.87	11.85	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	87.0	80.0	132.0	100.0	66.0	50.0	48.0	43.0	63.0	60.0	93.0	130.0	79.3	
EFFLUENT (MG/L)	17.5	35.0	43.2	25.0	23.3	8.5	6.0	7.5	12.5	10.0	12.0	10.9	17.6	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	42.35	93.80	127.44	122.25	75.72	28.81	16.74	19.20	38.37	25.60	25.44	21.14	50.86	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	3.3	2.8	2.8	2.9	2.5	2.3	3.6	2.8	3.3	3.1	3.5	3.9	3.1	
EFFLUENT (MG/L)	0.6	1.1*	1.1*	0.7	0.7	0.3	0.3	0.3	0.5	0.5	0.5	0.7	0.6	2
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	1.45	2.94	3.24	3.42	2.27	1.01	0.83	0.76	1.53	1.28	1.06	1.35	1.73	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	NO

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES	START DATE	END DATE	ANTICIPATED COMPLIANCE
COLLECTION SYSTEM - COLLECTION SYSTEM UNDER REVIEW		1990	
COLLECTION SYSTEM - INFILTRATION PROBLEMS BEING CORRECTED	1991		
OPERATIONAL/PROCESS - SAMPLING PROGRAM BEING MODIFIED			
SLUDGE DISPOSAL/REMOVAL - UPGRADING SLUDGE STORAGE FACILITIES	1989	1989	1990
FACILITY EXPANSION/UPGRADING - UPGRADING SECONDARY CLARIFIERS	1989	1989	1990

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : ATIKOKAN
PLANT : RAINY RIVER LAGOON
WORKS NUMBER : 110002290
TREATMENT : CONVENTIONAL LAGOON SEASONAL
:
:
DESIGN CAPACITY : 0.99 (1000 M3)

REGION : NORTHWEST
DISTRICT : RAINY RIVER
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : RAINY RIVER
MINOR BASIN : LAKE WINNIPEG EAST
MAJOR BASIN : NELSON RIVER
POPULATION SERVED : 975

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.51	0.52	0.63	1.14	0.69	1.07	1.00	1.00	0.53	0.49	0.57	0.57	0.73	
LAGOON DISCHARGE	ND	ND	ND	ND	54.64	80.44	ND	ND	18.75	23.88	42.65	ND	44.07	
BOD5														
INFLUENT (MG/L)	99.0	165.0	67.0	83.0	111.0	67.0	56.0	56.0	96.0	106.0	183.0	140.0	102.4	
EFFLUENT (MG/L)	ND	ND	ND	ND	9.8	9.0	ND	ND	3.9	2.0	4.8	ND	5.9	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	ND	6.76	9.63	ND	ND	2.06	0.98	2.73	ND	4.31	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	120.0	140.0	100.0	100.0	245.0	85.0	50.0	50.0	95.0	110.0	125.0	180.0	116.7	
EFFLUENT (MG/L)	ND	ND	ND	ND	14.6	15.4	ND	ND	3.3	1.7	3.8	ND	7.8	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	ND	10.07	16.47	ND	ND	1.74	0.83	2.16	ND	5.69	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	4.9	5.8	3.3	3.6	5.4	3.6	3.3	3.3	3.5	6.0	5.1	4.6	4.4	
EFFLUENT (MG/L)	ND	ND	ND	ND	1.4	1.7	ND	ND	0.3	0.3	1.3	ND	1.0	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	0.96	1.81	ND	ND	0.15	0.14	0.74	ND	0.73	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	NA	NA

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND NO DATA
NA NOT APPLICABLE

REMEDIAL MEASURES

START DATE	END DATE	ANTICIPATED COMPLIANCE

COLLECTION SYSTEM - COLLECTION SYSTEM UNDER REVIEW

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : BEARDMORE
PLANT : BEARDMORE LAGOON
WORKS NUMBER : 110002309
TREATMENT : EXFILTRATION LAGOON
:
:
DESIGN CAPACITY : 1.36 (1000 M3)

REGION : NORTHWEST
DISTRICT : THUNDER BAY
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : NO DISC.TO SURFACE WATER
MINOR BASIN : SUPERIOR
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 570

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.20	0.20	0.19	0.25	0.44	0.29	ND	0.22	0.20	0.20	0.21	0.22	0.24	
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BOD5														
INFLUENT (MG/L)	145.0	126.0	138.0	140.0	42.0	34.0	ND	155.0	130.0	125.0	210.0	170.0	128.6	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
SUSPENDED SOLIDS														
INFLUENT (MG/L)	110.0	95.0	80.0	100.0	70.0	90.0	ND	90.0	100.0	100.0	100.0	90.0	93.2	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.0	7.5	6.1	6.3	1.9	2.0	ND	6.5	7.5	10.9	6.7	7.0	6.2	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	NA	NO DIRECT DISCHARGE
SS	NA	NO DIRECT DISCHARGE
TP	NA	NO DIRECT DISCHARGE

NOTE:
BOD - HAS NO CRITERIA
SS - HAS NO CRITERIA
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : CARAMAT
PLANT : CARAMAT
WORKS NUMBER : 120003085
TREATMENT : EXFILTRATION LAGOON
: EXFILTRATION
:
DESIGN CAPACITY : 0.05 (1000 M3)

REGION : NORTHWEST
DISTRICT : THUNDER BAY
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : NO DISC.TO SURFACE WATER
MINOR BASIN : JAMES BAY
MAJOR BASIN : ARCTIC WATERSHED
POPULATION SERVED : 125

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCLED
AVG. DAILY FLOW (1000 M3)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BOD5														
INFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
SUSPENDED SOLIDS														
INFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	NA	NO DISCHARGE
SS	NA	NO DISCHARGE
TP	NA	NO DISCHARGE

NOTE:
BOD - HAS NO CRITERIA
SS - HAS NO CRITERIA
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : DRYDEN
PLANT : DRYDEN WPCP
WORKS NUMBER : 120000248
TREATMENT : CONTACT STABILIZATION
:
:
DESIGN CAPACITY : 6.81 (1000 M3)

REGION : NORTHWEST
DISTRICT : KENORA
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : WABIGOON RIVER
MINOR BASIN : LAKE WINNIPEG EAST
MAJOR BASIN : NELSON RIVER
POPULATION SERVED : 6,900

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	3.19	3.38	3.50	5.62	4.50	5.49	4.83	4.56	3.64	3.55	3.23	3.15	4.05	
BOD5														
INFLUENT (MG/L)	130.0	123.0	120.0	95.0	88.0	112.0	84.0	86.0	120.0	78.0	190.0	72.0	108.2	
EFFLUENT (MG/L)	9.3	15.0	12.0	17.0	14.0	6.4	8.4	6.7	4.3	2.9	4.4	9.0	9.1	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	29.66	50.70	42.00	95.54	63.00	35.13	40.57	30.55	15.65	10.29	14.21	28.35	36.86	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	160.0	130.0	130.0	210.0	110.0	130.0	70.0	75.0	500.0	160.0	120.0	160.0	162.9	
EFFLUENT (MG/L)	6.0	4.0	7.0	10.0	5.0	ND	20.0	20.0	ND	15.0	2.0	8.0	9.7	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	19.14	13.52	24.50	56.20	22.50	ND	96.60	91.20	ND	53.25	6.46	25.20	39.29	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	5.7	5.8	6.3	4.3	4.0	5.6	4.7	5.4	5.9	4.4	5.6	4.2	5.2	
EFFLUENT (MG/L)	ND	0.3	0.6	0.4	0.5	0.5	1.2	0.6	0.7	0.8	0.6	0.6	0.6	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	1.01	2.10	2.24	2.25	2.74	5.79	2.73	2.54	2.84	1.93	1.89	2.43	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	NA	NA

NO REMEDIAL MEASURES REPORTED

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : EAR FALLS
PLANT : EAR FALLS WPCP
WORKS NUMBER : 110001006
TREATMENT : EXTENDED AERATION
: CONVERTIBLE OPERATING MODE
:
DESIGN CAPACITY : 2.86 (1000 M3)

REGION : NORTHWEST
DISTRICT : KENORA
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : ENGLISH RIVER
MINOR BASIN : LAKE WINNIPEG EAST
MAJOR BASIN : NELSON RIVER
POPULATION SERVED : 1,750

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.51	1.52	1.36	1.46	1.40	1.34	1.36	1.36	1.26	1.25	1.27	1.28	1.36	
BOD5														
INFLUENT (MG/L)	39.0	75.0	73.0	31.0	52.0	53.0	58.0	31.0	60.0	194.0	86.0	68.0	68.3	
EFFLUENT (MG/L)	2.4	2.4	2.5	3.4	2.5	2.2	1.2	0.8	1.8	1.8	1.5	1.8	2.0	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	3.62	3.64	3.40	4.96	3.50	2.94	1.63	1.08	2.26	2.25	1.90	2.30	2.72	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	355.0	73.0	118.0	110.0	65.0	130.0	30.0	510.0	263.0	293.0	205.0	65.0	184.8	
EFFLUENT (MG/L)	15.0	12.0	9.0	22.5	8.0	7.5	4.0	7.0	6.3	15.5	8.0	5.0	10.0	--
CONCENTRATION LIMIT (MG/L)													25.0	--
LOADING (KG/D)	22.65	18.24	12.24	32.85	11.20	10.05	5.44	9.52	7.93	19.37	10.16	6.40	13.60	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	2.7	3.2	3.0	1.1	2.6	3.3	3.0	ND	3.7	6.2	4.5	2.9	3.3	--
EFFLUENT (MG/L)	0.5	0.5	0.5	0.7		0.5	0.3	0.8	0.5	0.7	0.3	0.4	0.5	--
CONCENTRATION LIMIT (MG/L)														--
LOADING (KG/D)	0.75	0.76	0.68	1.02		0.67	0.40	1.08	0.63	0.87	0.38	0.51	0.68	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	NA	NA

NO REMEDIAL MEASURES REPORTED

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : EMO
PLANT : EMO LAGOON
WORKS NUMBER : 110001015
TREATMENT : CONVENTIONAL LAGOON SEASONAL
:
:
DESIGN CAPACITY : 0.27 (1000 M3)

REGION : NORTHWEST
DISTRICT : RAINY RIVER
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : RAINY RIVER
MINOR BASIN : LAKE WINNIPEG EAST
MAJOR BASIN : NELSON RIVER
POPULATION SERVED : 750

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.41	0.38	0.44	0.72	0.53	0.65	0.53	0.60	0.41	0.41	0.44	0.35	0.49	
LAGOON DISCHARGE	ND	ND	ND	0.52	21.58	71.92	ND	ND	ND	ND	73.70	ND	41.93	
BOD5														
INFLUENT (MG/L)	156.0	46.0	63.0	118.0	29.0	86.0	55.0	89.0	131.0	134.0	163.0	172.0	103.5	
EFFLUENT (MG/L)	ND	ND	ND	20.0	14.1	22.5	ND	ND	ND	4.2	7.1	ND	13.6	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	14.40	7.47	14.62	ND	ND	ND	1.72	3.12	ND	6.66	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	177.0	130.0	80.0	138.0	163.0	90.0	73.0	190.0	140.0	130.0	260.0	155.0	143.8	
EFFLUENT (MG/L)	ND	ND	ND	25.0	18.7	58.3	ND	ND	ND	1.0	5.5	ND	21.7	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	18.00	9.91	37.89	ND	ND	ND	0.41	2.42	ND	10.63	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	7.7	5.1	3.9	6.3	1.6	4.7	4.1	5.7	5.9	7.4	6.3	6.2	5.4	
EFFLUENT (MG/L)	ND	ND	ND	1.9	1.8	1.2	ND	ND	ND	1.9	1.4	ND	1.6	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	1.36	0.95	0.78	ND	ND	ND	0.77	0.61	ND	0.78	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	NA	NA

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES

START DATE	END DATE	ANTICIPATED COMPLIANCE
FACILITY EXPANSION/UPGRADING - ENVIRONMENTAL ASSESSMENT BEING CONDUCTED		
FACILITY EXPANSION/UPGRADING - PRELIMINARY DESIGN PHASE		

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : FORT FRANCES
PLANT : FORT FRANCES WPCP
PLANT NUMBER : 11000258
TREATMENT : PRIMARY

DESIGN CAPACITY : 9.09 (1000 M3)

REGION : NORTHWEST
DISTRICT : RAINY RIVER
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : RAINY RIVER
MINOR BASIN : LAKE WINNIPEG EAST
MAJOR BASIN : NELSON RIVER
POPULATION SERVED : 8,750

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	5.51	5.86	6.34	9.58	7.99	9.95	9.00	8.10	7.05	6.63	6.28	5.87	7.35	
BOD														
INFLUENT (MG/L)	66.0	60.0	79.0	42.0	40.0	63.0	50.0	54.0	72.0	65.0	86.0	98.0	64.6	
EFFLUENT (MG/L)	39.0	53.5	42.0	30.0	44.5	35.5	36.0	24.0	35.0	40.5	73.0	75.0	44.0	
LOADING (KG/D)	214.89	313.51	266.28	287.40	355.55	353.22	324.00	194.40	246.75	268.51	458.44	440.25	323.40	
PERCENT REMOVAL	41	11	47	29	ND	44	28	56	51	38	15	23	32	
PERCENT REMOVAL LIMITS													30	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	153.0	98.0	175.0	90.0	70.0	115.0	95.0	140.0	118.0	118.0	163.0	275.0	134.2	
EFFLUENT (MG/L)	53.7	75.0	65.0	42.5	52.5	57.5	37.5	28.3	40.0	70.0	30.0	75.0	52.3	
LOADING (KG/D)	295.88	439.50	412.10	407.15	419.47	572.12	337.50	229.23	282.00	464.10	188.40	440.25	384.41	
PERCENT REMOVAL	65	23	63	53	25	50	61	80	66	41	82	73	61	
PERCENT REMOVAL LIMITS													50	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	3.4	3.1	3.3	1.9	2.6	3.0	2.4	2.7	3.1	4.8	3.9	4.0	3.2	
EFFLUENT (MG/L)	1.8	2.6	1.7	1.0	2.0	2.1	1.6	1.7	2.0	2.6	0.8	2.4	1.9	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	9.91	15.23	10.77	9.58	15.98	20.89	14.40	13.77	14.10	17.23	5.02	14.08	13.97	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	30%	YES
SS	50%	YES
TP	NA	NA

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES

START DATE	END DATE	ANTICIPATED COMPLIANCE
COLLECTION SYSTEM - SEWAGE UPGRADE UNDERWAY		
COLLECTION SYSTEM - INFILTRATION PROBLEMS BEING CORRECTED		
COLLECTION SYSTEM - ILLEGAL CONNECTIONS BEING ELIMINATED		
COLLECTION SYSTEM - ENFORCING SEWER-USE BYLAWS		
FACILITY EXPANSION/UPGRADING - PRELIMINARY DESIGN PHASE		

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : GERALDTON
PLANT : GERALDTON WPCP
WORKS NUMBER : 110001649
TREATMENT : EXTENDED AERATION
:
:
DESIGN CAPACITY : 1.81 (1000 M3)

REGION : NORTHWEST
DISTRICT : THUNDER BAY
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : LAKE KENOGAMISIS
MINOR BASIN : JAMES BAY
MAJOR BASIN : ARCTIC WATERSHED
POPULATION SERVED : 2,901

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.63	1.66	1.53	2.71	3.10	1.98	1.66	1.33	1.18	1.31	1.55	1.28	1.74	
BOD5														
INFLUENT (MG/L)	96.0	76.0	84.0	57.0	42.0	61.0	88.0	75.0	108.0	84.0	106.0	120.0	83.1	
EFFLUENT (MG/L)	3.2	5.4	4.6	3.6	10.2	3.1	2.0	1.9	2.1	2.2	1.8	2.0	3.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	5.21	8.96	7.03	9.75	31.62	6.13	3.32	2.52	2.47	2.88	2.79	2.56	6.09	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	120.0	93.0	200.0	190.0	65.0	90.0	67.0	65.0	100.0	93.0	150.0	130.0	113.6	
EFFLUENT (MG/L)	7.0	8.0	5.0	5.5	11.0	6.0	2.7	3.0	4.5	2.0	3.0	3.0	5.1	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	11.41	13.28	7.65	14.90	34.10	11.88	4.48	3.99	5.31	2.62	4.65	3.84	8.87	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	4.4	4.3	4.1	3.3	2.4	3.9	7.2	4.7	5.3	5.2	4.4	4.5	4.5	
EFFLUENT (MG/L)	2.7	2.7	2.5	1.4	1.0	1.8	2.4	2.9	2.9	2.9	2.1	2.3	2.3	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	4.40	4.48	3.82	3.79	3.10	3.56	3.98	3.85	3.42	3.79	3.25	2.94	4.00	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	NA	NA

NO REMEDIAL MEASURES REPORTED

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : GOLDEN
PLANT : BALMERTOWN WPCP
WORKS NUMBER : 1100032991
TREATMENT : EXTENDED AERATION
:
:
DESIGN CAPACITY : 1.22 (1000 M3)

REGION : NORTHWEST
DISTRICT : KENORA
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : BALMER CREEK
MINOR BASIN : LAKE WINNIPEG EAST
MAJOR BASIN : NELSON RIVER
POPULATION SERVED : 1,300

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.09	1.16	1.17	1.42	1.21	1.24	1.09	1.03	0.78	0.70	0.81	1.07	1.06	
BOD5														
INFLUENT (MG/L)	107.0	96.0	52.0	110.0	63.0	91.0	89.0	88.0	70.0	89.0	121.0	117.0	91.1	
EFFLUENT (MG/L)	7.5	14.0	6.8	4.2	2.5	4.0	3.1	3.0	4.0	11.2	3.9	4.7	5.7	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	8.17	16.24	7.95	5.96	3.02	4.96	3.37	3.09	3.12	7.84	3.15	5.02	6.04	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	76.0	103.0	48.0	103.0	83.0	103.0	92.0	75.0	53.0	83.0	85.0	83.0	82.3	
EFFLUENT (MG/L)	8.0	17.5	11.0	6.5	4.5	8.0	2.0	6.0	15.0	22.5	9.0	8.0	9.8	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	8.72	20.30	12.87	9.23	5.44	9.92	2.18	6.18	11.70	15.75	7.29	8.56	10.39	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	4.2	4.4	5.0	3.3	3.9	4.7	3.8	4.9	4.4	5.1	4.8	4.6	4.4	
EFFLUENT (MG/L)	2.4	1.3	1.8	0.9	1.3	1.8	1.9	2.8	3.3	3.5	2.6	2.4	2.2	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	2.61	1.50	2.10	1.27	1.57	2.23	2.07	2.88	2.57	2.45	2.10	2.56	2.33	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	NA	NA

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : GOLDEN
PLANT : COCHENOUR LAGOON
WORKS NUMBER : 110002504
TREATMENT : CONVENTIONAL LAGOON SEASONAL
:
:
DESIGN CAPACITY : 0.76 (1000 M3)

REGION : NORTHWEST
DISTRICT : KENORA
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : RED LAKE
MINOR BASIN : LAKE WINNIPEG EAST
MAJOR BASIN : NELSON RIVER
POPULATION SERVED : 800

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.51	0.45	0.48	0.42	0.36	0.33	0.30	0.31	0.34	0.38	0.53	0.45	0.41	
LAGOON DISCHARGE	ND	ND	ND	ND	ND	53.90	ND	ND	ND	ND	53.90	ND	53.90	
BOD5														
INFLUENT (MG/L)	12.0	ND	ND	ND	37.0	154.0	154.0	94.0	88.0	107.0	61.0	50.0	84.1	
EFFLUENT (MG/L)	ND	ND	ND	ND	5.4	ND	ND	ND	ND	ND	1.5	ND	3.5	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	ND	ND	ND	ND	1.94	ND	ND	ND	ND	ND	0.79	ND	1.44	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	15.0	ND	ND	ND	55.0	308.0	143.0	75.0	78.0	110.0	68.0	70.0	102.4	
EFFLUENT (MG/L)	ND	ND	ND	ND	5.0	ND	ND	ND	ND	ND	5.0	ND	5.0	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	ND	ND	ND	ND	1.80	ND	ND	ND	ND	ND	2.65	ND	2.05	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	2.6	ND	ND	ND	1.6	7.2	7.4	7.0	4.3	6.3	3.4	2.2	4.7	
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.1	ND	0.1	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.05	ND	0.04	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	NA	NA

NO REMEDIAL MEASURES REPORTED

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : IGNACE
PLANT : IGNACE WPCP
WORKS NUMBER : 110001355
TREATMENT : EXTENDED AERATION
: PHOSPHORUS REMOVAL CONTINUOUS
:
DESIGN CAPACITY : 2.53 (1000 M3)

REGION : NORTHWEST
DISTRICT : KENORA
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : AGIMAC CREEK
MINOR BASIN : LAKE WINNIPEG EAST
MAJOR BASIN : NELSON RIVER
POPULATION SERVED : 2,285

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.39	1.47	1.65	1.78	2.30	1.84	1.89	1.47	1.33	1.38	1.26	1.34	1.59	
BOD5														
INFLUENT (MG/L)	75.0	82.0	108.0	46.0	57.0	65.0	126.0	79.0	80.0	162.0	81.0	59.0	85.0	
EFFLUENT (MG/L)	4.0	3.7	5.1	3.4	3.2	5.4	3.5	4.8	5.0	3.1	2.5	3.6	3.9	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	5.56	5.43	8.41	6.05	7.36	9.93	6.61	7.05	6.65	4.27	3.15	4.82	6.20	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	105.0	90.0	225.0	75.0	80.0	45.0	40.0	53.0	80.0	272.0	125.0	50.0	103.3	
EFFLUENT (MG/L)	12.7	15.0	12.5	12.5	13.3	9.5	10.0	10.0	9.5	20.0	10.0	12.5	12.3	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	17.65	22.05	20.62	22.25	30.59	17.48	18.90	14.70	12.63	27.60	12.60	16.75	19.56	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	4.0	4.1	6.7	3.1	3.2	2.9	3.1	5.0	4.1	6.8	5.0	4.2	4.4	
EFFLUENT (MG/L)	0.6	0.7	0.7	0.6	0.6	0.4	0.6	0.6	0.5	0.8	0.7	0.9	0.6	
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	0.83	1.02	1.15	1.06	1.38	0.73	1.13	0.88	0.66	1.10	0.88	1.20	0.95	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	1.0 MG/L	YES

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED MONTHLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : KENORA
PLANT : KENORA WPCP
WORKS NUMBER : 120000239
TREATMENT : EXT AERATION/CONT STABLIZATION
:
:
DESIGN CAPACITY : 18.18 (1000 M3)

REGION : NORTHWEST
DISTRICT : KENORA
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : WINNIPEG RIVER
MINOR BASIN : LAKE WINNIPEG EAST
MAJOR BASIN : NELSON RIVER
POPULATION SERVED : 12,000

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	8.15	8.46	8.81	12.68	12.33	16.87	13.34	12.72	10.28	9.33	9.19	9.08	10.94	
BOD5														
INFLUENT (MG/L)	88.0	110.0	72.0	88.0	105.0	90.0	100.0	115.0	102.0	105.0	86.0	76.0	94.8	
EFFLUENT (MG/L)	17.0	23.0	14.0	28.0	6.3	8.0	12.0	8.0	24.0	7.4	32.0	12.0	16.0	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	138.55	194.58	123.34	355.04	77.67	134.96	160.08	101.76	246.72	69.04	294.08	108.96	175.04	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	110.0	120.0	100.0	85.0	540.0	95.0	300.0	220.0	80.0	130.0	95.0	120.0	166.3	
EFFLUENT (MG/L)	10.0	9.0	8.0	15.0	15.0	35.0	9.0	5.0	10.0	4.0	35.0	6.0	13.4	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	81.50	76.14	70.48	190.20	184.95	590.45	120.06	63.60	102.80	37.32	321.65	54.48	146.60	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	5.2	5.4	3.2	4.7	5.0	4.3	4.4	4.4	4.0	5.7	3.8	3.9	4.5	
EFFLUENT (MG/L)	2.6	2.1	2.0	2.7	0.6	0.6	0.8	0.6	0.4	0.4	1.1	0.3	1.2	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	21.19	17.76	17.62	34.23	7.39	10.12	10.67	7.63	4.11	3.73	10.10	2.72	13.13	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	NA	NA

NO REMEDIAL MEASURES REPORTED

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : LONGLAC
PLANT : LONGLAC WPCP
WORKS NUMBER : 110001042
TREATMENT : CONTACT STABILIZATION
:
:
DESIGN CAPACITY : 2.45 (1000 M3)

REGION : NORTHWEST
DISTRICT : THUNDER BAY
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : MAKING GROUND RIVER
MINOR BASIN : JAMES BAY
MAJOR BASIN : ARCTIC WATERSHED
POPULATION SERVED : 2,900

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.79	1.98	1.89	3.48	3.01	2.21	2.06	1.91	1.73	1.83	1.97	1.32	2.10	
BOD:														
INFLUENT (MG/L)	82.0	91.0	81.0	86.0	63.0	58.0	96.0	68.0	89.0	64.0	99.0	106.0	81.9	
EFFLUENT (MG/L)	5.3	13.5	6.8	9.7	7.8	5.6	5.3	4.8	5.7	4.7	4.2	10.5	7.0	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	9.48	26.73	12.85	33.75	23.47	12.37	10.91	9.16	9.86	8.60	8.27	13.86	14.70	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	95.0	103.0	107.0	238.0	75.0	105.0	65.0	93.0	63.0	90.0	140.0	455.0	135.8	
EFFLUENT (MG/L)	7.0	7.5	20.0	15.0	12.5	8.0	4.0	11.5	5.0	3.0	4.5	6.0	8.7	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	12.53	14.85	37.80	52.20	37.62	17.68	8.24	21.96	8.65	5.49	8.86	7.92	18.27	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	5.1	5.6	5.2	3.9	3.6	4.2	6.2	4.3	5.1	4.1	4.3	5.1	4.7	
EFFLUENT (MG/L)	1.2	1.1	1.8	0.6	0.5	0.5	0.3	0.6	0.4	0.4	0.4	0.4	0.7	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	2.14	2.17	3.40	2.08	1.50	1.10	0.61	1.14	0.69	0.73	0.78	0.52	1.47	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	NA	NA

NO REMEDIAL MEASURES REPORTED

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : MADSEN
PLANT : MADSEN WPCP
WORKS NUMBER : 110002363
TREATMENT : COMMUNAL SEPTIC TANK
:
:
DESIGN CAPACITY : 0.27 (1000 M3)

REGION : NORTHWEST
DISTRICT : KENORA
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : NO DISCHARGE TO S.WATER
MINOR BASIN : LAKE WINNIPEG EAST
MAJOR BASIN : NELSON RIVER
POPULATION SERVED : 300

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.08	0.11	0.08	0.09	0.10	0.10	0.11	0.09	0.09	0.09	0.10	0.12	0.10	
BOD5														
INFLUENT (MG/L)	72.0	134.0	86.0	61.0	47.0	284.0	108.0	155.0	117.0	104.0	143.0	106.0	118.1	
EFFLUENT (MG/L)	86.0	64.8	58.0	45.0	39.0	64.8	85.0	84.0	73.3	60.5	70.5	57.0	65.7	
LOADING (KG/D)	6.88	7.12	4.64	4.05	3.90	6.48	9.35	7.56	6.59	5.44	7.05	6.84	6.57	
PERCENT REMOVAL	ND	52	33	26	17	77	21	46	37	42	51	46	44	
PERCENT REMOVAL LIMITS													30	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	45.0	135.0	91.0	73.0	40.0	75.0	80.0	40.0	80.0	103.0	113.0	122.0	83.1	
EFFLUENT (MG/L)	50.0	36.0	40.0	40.0	41.3	41.3	28.0	35.0	30.0	40.0	37.5	38.3	38.1	
LOADING (KG/D)	4.00	3.96	3.20	3.60	4.13	4.13	3.08	3.15	2.70	3.60	3.75	4.59	3.81	
PERCENT REMOVAL	ND	73	56	45	ND	45	65	13	63	61	67	69	54	
PERCENT REMOVAL LIMITS													50	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	4.4	5.7	7.0	4.3	8.6	6.2	9.7	4.8	5.1	4.6	7.0	5.7	6.1	
EFFLUENT (MG/L)	4.7	4.2	4.4	3.6	3.7	4.7	4.5	4.9	4.4	4.2	3.7	4.2	4.3	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	0.37	0.46	0.35	0.32	0.37	0.47	0.49	0.44	0.39	0.37	0.37	0.50	0.43	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	30%	NO DIRECT DISCHARGE
SS	50%	NO DIRECT DISCHARGE
TP	NA	NO DIRECT DISCHARGE

NO REMEDIAL MEASURES REPORTED

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : MANITOUWADGE
PLANT : MANITOUWADGE LAGOON
WORKS NUMBER : 120001980
TREATMENT : AERATED LAGOON
: CONTINUOUS DISCHARGE
:
DESIGN CAPACITY : 4.10 (1000 M3)

REGION : NORTHWEST
DISTRICT : THUNDER BAY
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : RUDDER LAKE
MINOR BASIN : SUPERIOR
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 5,000

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	2.92	2.79	2.58	3.53	5.16	3.28	3.00	2.85	2.67	2.57	2.83	2.79	3.08	
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BOD5														
INFLUENT (MG/L)	102.0	113.0	106.0	46.0	52.0	52.0	44.0	98.0	94.0	78.0	205.0	76.0	88.8	
EFFLUENT (MG/L)	18.0	22.0	17.0	13.0	16.0	16.0	6.5	7.0	3.7	7.4	16.0	10.0	12.7	
CONCENTRATION LIMIT (MG/L)													30.0	
LOADING (KG/D)	52.56	61.38	43.86	45.89	82.56	52.48	19.50	19.95	9.87	19.01	45.28	27.90	39.12	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	85.0	110.0	100.0	90.0	60.0	95.0	8.0	60.0	60.0	110.0	140.0	85.0	83.6	
EFFLUENT (MG/L)	15.0	20.0	10.0	25.0	10.0	55.0	15.0	10.0	7.0	15.0	15.0	10.0	17.3	
CONCENTRATION LIMIT (MG/L)													40.0	
LOADING (KG/D)	43.80	55.80	25.80	88.25	51.60	180.40	45.00	28.50	18.69	38.55	42.45	27.90	53.28	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	4.1	6.3	5.0	4.2	1.9	3.5	3.0	4.2	4.4	4.0	2.9	3.3	3.9	
EFFLUENT (MG/L)	3.1	3.1	4.1	3.6	2.7	2.2	3.5	3.2	2.8	3.4	3.5	3.3	3.2	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	9.05	8.64	10.57	12.70	13.93	7.21	10.50	9.12	7.47	8.73	9.90	9.20	9.86	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	30.0 MG/L	YES
SS	40.0 MG/L	YES
TP	NA	NA

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : MARATHON
PLANT : MARATHON WPCP
WORKS NUMBER : 120000471
TREATMENT : EXTENDED AERATION
:
:
DESIGN CAPACITY : 4.40 (1000 M3)

REGION : NORTHWEST
DISTRICT : THUNDER BAY
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : LAKE SUPERIOR
MINOR BASIN : SUPERIOR
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 5,000

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	2.14	2.39	2.95	2.68	2.09	1.50	1.47	1.41	1.57	1.69	1.64	1.60	1.93	
BOD5														
INFLUENT (MG/L)	141.0	96.0	88.0	71.0	112.0	123.0	128.0	140.0	121.0	121.0	154.0	175.0	122.5	
EFFLUENT (MG/L)	3.0	3.6	3.2	2.2	3.4	1.7	2.6	2.9	3.6	3.6	3.7	2.3	3.0	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	6.42	8.60	9.44	5.89	7.10	2.55	3.82	4.08	5.65	6.08	6.06	3.68	5.79	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	245.0	100.0	98.0	170.0	123.0	100.0	90.0	108.0	95.0	125.0	150.0	120.0	127.0	
EFFLUENT (MG/L)	5.0	5.0	4.0	4.0	5.0	3.5	2.7	1.6	2.0	6.0	3.0	2.0	3.7	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	10.70	11.95	11.80	10.72	10.45	5.25	3.96	2.25	3.14	10.14	4.92	3.20	7.14	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	6.5	5.9	4.7	4.6	5.1	6.1	8.2	8.4	6.6	7.8	7.1	7.2	6.5	
EFFLUENT (MG/L)	4.4	4.4	3.8	2.9	4.0	5.2	6.2	5.3	5.0	4.5	4.3	5.0	4.6	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	9.41	10.51	11.21	7.77	8.36	7.80	9.11	7.47	7.85	7.60	7.05	8.00	8.88	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	NA	NA

NO REMEDIAL MEASURES REPORTED

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : NAKINA
PLANT : NAKINA WPCP (NO PH REMOVAL AUG.18 1987)
WORKS NUMBER : 110003308
TREATMENT : EXTENDED AERATION
: CONVERTIBLE OPERATING MODE
:
DESIGN CAPACITY : 1.70 (1000 M3)

REGION : NORTHWEST
DISTRICT : THUNDER BAY
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : BALKAM CREEK
MINOR BASIN : JAMES BAY
MAJOR BASIN : ARCTIC WATERSHED
POPULATION SERVED : 750

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.43	0.42	0.38	0.48	0.83	0.58	0.37	0.31	0.34	0.38	0.45	0.41	0.45	
BOD5														
INFLUENT (MG/L)	88.0	117.0	395.0	105.0	61.0	70.0	77.0	151.0	138.0	72.0	112.0	104.0	124.2	
EFFLUENT (MG/L)	1.5	1.9	2.1	1.9	2.1	1.6	1.1	1.3	1.4	1.0	2.4	3.2	1.8	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	0.64	0.79	0.79	0.91	1.74	0.92	0.40	0.40	0.47	0.38	1.08	1.31	0.81	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	105.0	125.0	500.0	240.0	98.0	53.0	60.0	163.0	128.0	75.0	105.0	105.0	146.4	
EFFLUENT (MG/L)	5.5	5.4	8.0	5.0	5.0	3.5	2.7	3.7	3.0	4.5	9.0	12.0	5.6	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	2.36	2.26	3.04	2.40	4.15	2.03	0.99	1.14	1.02	1.71	4.05	4.92	2.52	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	4.2	5.4	34.0	4.6	2.6	3.2	4.3	6.7	5.1	4.0	3.5	5.1	6.9	
EFFLUENT (MG/L)	2.1	2.4	2.7	2.0	1.4	1.9	1.7	0.3	0.7	1.1	1.7	2.0	1.7	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	0.90	1.00	1.02	0.96	1.16	1.10	0.62	0.09	0.23	0.41	0.76	0.82	0.77	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	NA	NA

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : NIPIGON
PLANT : NIPIGON WPCP
WORKS NUMBER : 120000514
TREATMENT : PRIMARY
:
:
DESIGN CAPACITY : 1.63 (1000 M3)

REGION : NORTHWEST
DISTRICT : THUNDER BAY
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : NIPIGON RIVER
MINOR BASIN : SUPERIOR
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 2,180

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.78	1.77	1.73	1.78	1.92	1.80	1.65	1.65	1.67	1.59	1.67	1.75	1.73	
BOD5														
INFLUENT (MG/L)	96.0	96.0	112.0	64.0	122.0	115.0	ND	94.0	94.0	98.0	98.0	152.0	103.7	
EFFLUENT (MG/L)	50.0	50.0	41.0	35.0	74.0	76.0	82.0	72.0	34.0	55.0	52.0	145.0	63.8	
LOADING (KG/D)	89.00	88.50	70.93	62.30	142.08	136.80	135.30	118.80	56.78	87.45	86.84	253.75	110.37	
PERCENT REMOVAL	48	48	63	45	39	34		23	64	44	47	05	38	
PERCENT REMOVAL LIMITS													30	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	90.0	90.0	140.0	120.0	160.0	100.0	ND	ND	110.0	160.0	140.0	130.0	124.0	
EFFLUENT (MG/L)	45.0	45.0	45.0	45.0	35.0	160.0	30.0	25.0	10.0	40.0	40.0	60.0	48.3	
LOADING (KG/D)	80.10	79.65	77.85	80.10	67.20	288.00	49.50	41.25	16.70	63.60	66.80	105.00	83.56	
PERCENT REMOVAL	50	50	68	63	78	ND			91	75	71	54	61	
PERCENT REMOVAL LIMITS													50	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	5.8	5.8	4.8	5.0	6.8	4.7	ND	6.2	6.8	5.4	6.8	4.8	5.7	
EFFLUENT (MG/L)	3.9	3.9	3.0	3.0	4.2	3.8	3.6	3.9	3.1	4.8	4.0	4.6	3.8	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	6.94	6.90	5.19	5.34	8.06	6.84	5.94	6.43	5.17	7.63	6.68	8.05	6.57	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	30%	YES
SS	50%	YES
TP	NA	NA

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : PICKLE LAKE
PLANT : PICKLE LAKE WPCP
WORKS NUMBER : 110002185
TREATMENT : EXTENDED AERATION
:
:
DESIGN CAPACITY : 0.90 (1000 M3)

REGION : NORTHWEST
DISTRICT : KENORA
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : KAWINOGANS RIVER
MINOR BASIN : JAMES BAY
MAJOR BASIN : ARCTIC WATERSHED
POPULATION SERVED : 425

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.29	0.34	0.36	0.40	0.48	0.52	0.60	0.54	0.47	0.39	0.37	0.40	0.43	
BOD5														
INFLUENT (MG/L)	68.0	130.0	119.0	92.0	30.0	15.0	17.0	52.0	42.0	52.0	135.0	38.0	65.8	
EFFLUENT (MG/L)	3.3	2.7	4.8	4.1	2.5	2.2	1.6	1.8	1.5	1.6	1.8	2.1	2.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	0.95	0.91	1.72	1.64	1.20	1.14	0.96	0.97	0.70	0.62	0.66	0.84	1.08	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	68.0	260.0	120.0	180.0	42.0	20.0	25.0	55.0	30.0	53.0	253.0	50.0	96.3	
EFFLUENT (MG/L)	8.0	7.0	11.5	4.5	15.0	4.5	1.5	3.0	3.5	3.7	4.5	23.5	7.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	2.32	2.38	4.14	1.80	7.20	2.34	0.90	1.62	1.64	1.44	1.66	9.40	3.23	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	3.1	3.4	1.7	2.6	1.3	1.4	1.0	2.4	1.8	2.6	7.1	1.7	2.5	
EFFLUENT (MG/L)	1.5	1.5	1.9	0.7	0.5	0.6	0.4	1.2	1.0	2.0	1.2	0.6	1.1	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	0.43	0.51	0.68	0.28	0.24	0.31	0.24	0.64	0.47	0.78	0.44	0.24	0.47	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	NA	NA

NO REMEDIAL MEASURES REPORTED

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : RED LAKE
PLANT : RED LAKE WPCP
WORKS NUMBER : 110001131
TREATMENT : EXTENDED AERATION
:
:
DESIGN CAPACITY : 2.46 (1000 M3)

REGION : NORTHWEST
DISTRICT : KENORA
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : HOWEY BAY
MINOR BASIN : LAKE WINNIPEG EAST
MAJOR BASIN : NELSON RIVER
POPULATION SERVED : 1,945

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	1.93	1.93	1.89	2.25	2.25	2.18	1.96	1.85	1.67	1.71	1.88	1.98	1.96	
BOD5														
INFLUENT (MG/L)	100.0	40.0	73.0	34.0	56.0	60.0	82.0	38.0	60.0	75.0	93.0	100.0	67.6	
EFFLUENT (MG/L)	2.9	3.2	4.6	3.8	3.1	3.9	2.6	1.6	3.1	1.8	3.5	3.6	3.1	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	5.59	6.17	8.69	8.55	6.97	8.50	5.09	2.96	5.17	3.07	6.58	7.12	6.08	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	88.0	63.0	78.0	48.0	73.0	48.0	83.0	40.0	67.0	88.0	93.0	73.0	70.2	
EFFLUENT (MG/L)	5.0	4.5	8.0	9.0	7.5	15.0	3.0	4.5	5.3	5.0	7.0	8.5	6.9	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	9.65	8.68	15.12	20.25	16.87	32.70	5.88	8.32	8.85	8.55	13.16	16.83	13.52	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	3.3	2.8	3.1	2.1	2.6	3.1	3.6	3.0	3.0	4.1	3.8	2.9	3.1	
EFFLUENT (MG/L)	1.5	1.3	1.4	1.0	1.1	1.8	1.7	1.5	1.8	2.1	1.5	1.4	1.5	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	2.89	2.50	2.64	2.25	2.47	3.92	3.33	2.77	3.00	3.59	2.82	2.77	2.94	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	NA	NA

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : RED ROCK
PLANT : RED ROCK WPCP
WORKS NUMBER : 120001817
TREATMENT : PRIMARY
:
:
DESIGN CAPACITY : 1.27 (1000 M3)

REGION : NORTHWEST
DISTRICT : THUNDER BAY
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : NIPIGON BAY
MINOR BASIN : SUPERIOR
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 1,150

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.72	0.71	0.73	1.19	1.11	1.07	0.94	0.96	0.75	0.72	0.67	0.64	0.85	
BOD5														
INFLUENT (MG/L)	84.0	120.0	106.0	44.0	78.0	70.0	64.0	74.0	60.0	72.0	135.0	118.0	85.4	
EFFLUENT (MG/L)	38.0	28.0	39.0	29.0	34.0	21.0	41.0	9.0	22.0	37.0	85.0	50.0	36.1	
LOADING (KG/D)	27.36	19.88	28.47	34.51	37.74	22.47	38.54	8.64	16.50	26.64	56.95	32.00	30.69	
PERCENT REMOVAL	55	77	63	34	56	70	36	88	63	49	37	58	58	
PERCENT REMOVAL LIMITS													30	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	75.0	130.0	160.0	70.0	110.0	120.0	25.0	55.0	60.0	95.0	85.0	130.0	92.9	
EFFLUENT (MG/L)	15.0	20.0	30.0	25.0	30.0	35.0	6.0	8.0	20.0	15.0	35.0	30.0	22.4	
LOADING (KG/D)	10.80	14.20	21.90	29.75	33.30	37.45	5.64	7.68	15.00	10.80	23.45	19.20	19.04	
PERCENT REMOVAL	80	85	81	64	73	71	76	85	67	84	59	77	76	
PERCENT REMOVAL LIMITS													50	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	4.4	5.9	6.3	1.5	3.8	3.5	2.2	2.9	4.6	3.5	3.6	5.2	4.0	
EFFLUENT (MG/L)	2.3	2.3	2.6	0.9	1.6	1.4	1.7	0.9	1.5	2.0	21.0	3.3	3.5	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	1.65	1.63	1.89	1.07	1.77	1.49	1.59	0.86	1.12	1.44	14.07	2.11	2.98	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	30%	YES
SS	50%	YES
TP	NA	NA

NO REMEDIAL MEASURES REPORTED

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : SCHREIBER
PLANT : SCHREIBER WPCP
WORKS NUMBER : 110002112
TREATMENT : EXTENDED AERATION
: CONTACT STABILIZATION
: CONVERTIBLE OPERATING MODE
DESIGN CAPACITY : 1.13 (1000 M3)

REGION : NORTHWEST
DISTRICT : THUNDER BAY
OPERATING AUTHORITY : MINISTRY OF THE ENVIRONMENT
WATERCOURSE : CREEK TO L.SUPERIOR
MINOR BASIN : SUPERIOR
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 1,937

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.63	0.64	0.64	0.72	0.83	0.73	0.77	0.79	0.78	0.78	0.82	0.84	0.75	
BOD5														
INFLUENT (MG/L)	108.0	115.0	117.0	115.0	110.0	97.0	113.0	83.0	170.0	106.0	130.0	120.0	115.3	
EFFLUENT (MG/L)	41.0	33.0	38.7	13.0	24.1	23.0	ND	6.1	7.5	4.8	11.9	11.5	19.5	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	25.83	21.12	24.76	9.36	20.00	16.79	ND	4.81	5.85	3.74	9.75	9.66	14.63	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	170.0	110.0	133.0	113.0	101.0	88.0	55.0	68.0	215.0	125.0	195.0	83.0	121.3	
EFFLUENT (MG/L)	37.5	30.0	17.1	5.8	16.4	26.7	22.5	13.4	15.7	8.0	27.5	15.0	19.6	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	23.62	19.20	10.94	4.17	13.61	19.49	17.32	10.58	12.24	6.24	22.55	12.60	14.70	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	7.6	5.4	7.1	5.6	4.2	5.5	5.1	ND	6.0	5.6	4.0	4.2	5.5	
EFFLUENT (MG/L)	3.7	3.3	4.1	3.0	3.0	3.2	2.8	3.5	2.9	3.5	2.6	2.5	3.2	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	2.33	2.11	2.62	2.16	2.49	2.33	2.15	2.76	2.26	2.73	2.13	2.10	2.40	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	YES
TP	NA	NA

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : SIOUX LOOKOUT
PLANT : SIOUX LOOKOUT WPCP
WORKS NUMBER : 120000220
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
:
:
DESIGN CAPACITY : 2.27 (1000 M3)

REGION : NORTHWEST
DISTRICT : KENORA
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : PELICAN LAKE
MINOR BASIN : LAKE WINNIPEG EAST
MAJOR BASIN : NELSON RIVER
POPULATION SERVED : 3,006

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	2.32	1.71	1.84	1.92	1.86	1.79	1.58	1.58	1.72	1.68	1.75	1.64	1.78	
BOD5														
INFLUENT (MG/L)	124.0	100.0	290.0	106.0	130.0	235.0	153.0	ND	9.0	285.0	155.0	154.0	158.3	
EFFLUENT (MG/L)	21.0	20.0	17.0	9.2	0.8	5.0	33.0	ND	14.0	130.0	9.0	9.0	24.4	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	48.72	34.20	31.28	17.66	1.48	8.95	52.14	ND	24.08	218.40	15.75	14.76	43.43	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	60.0	50.0	590.0	100.0	480.0	350.0	55.0	ND	4.0	290.0	440.0	120.0	230.8	
EFFLUENT (MG/L)	15.0	20.0	9.0	9.0	4.0	9.0	6.0	5.0	6.0	270.0	10.0	8.0	30.9*	
CONCENTRATION LIMIT (MG/L)													25.0	
LOADING (KG/D)	34.80	34.20	16.56	17.28	7.44	16.11	9.48	7.90	10.32	453.60	17.50	13.12	55.00	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	4.6	5.6	4.1	5.3	3.8	5.4	5.5	ND	2.9	5.4	4.7	4.2	4.7	
EFFLUENT (MG/L)	3.5	3.3	2.8	2.5		1.3	3.7	2.8	3.1	3.8	3.3	3.6	2.8	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	8.12	5.64	5.15	4.80		2.32	5.84	4.42	5.33	6.38	5.77	5.90	4.98	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	25.0 MG/L	YES
SS	25.0 MG/L	NO
TP	NA	NA

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES

	START DATE	END DATE	ANTICIPATED COMPLIANCE
COLLECTION SYSTEM - COLLECTION SYSTEM UNDER REVIEW			
SLUDGE DISPOSAL/REMOVAL - UPGRADING LANDFILL SITE			
FACILITY EXPANSION/UPGRADING - ENVIRONMENTAL ASSESSMENT BEING CONDUCTED			
FACILITY EXPANSION/UPGRADING - PRELIMINARY DESIGN PHASE			

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : TERRACE BAY
PLANT : TERRACE BAY LAGOON
WORKS NUMBER : 120000499
TREATMENT : EXFILTRATION LAGOON
: NO DISCHARGE
:
DESIGN CAPACITY : 1.36 (1000 M3)

REGION : NORTHWEST
DISTRICT : THUNDER BAY
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : NO DISC.TO SURFACE WATER
MINOR BASIN : SUPERIOR
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 2,000

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
LAGOON DISCHARGE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BOD5														
INFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
SUSPENDED SOLIDS														
INFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
EFFLUENT (MG/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	NA	NO DIRECT DISCHARGE
SS	NA	NO DIRECT DISCHARGE
TP	NA	NO DIRECT DISCHARGE

NOTE:
BOD - HAS NO CRITERIA
SS - HAS NO CRITERIA
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : TERRACE BAY
PLANT : TERRACE BAY WPCP
WORKS NUMBER : 1200003030
TREATMENT : EXTENDED AERATION
: EXFILTRATION LAGOON
:
DESIGN CAPACITY : 0.54 (1000 M3)

REGION : NORTHWEST
DISTRICT : THUNDER BAY
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : NO DISC.TO SURFACE WATER
MINOR BASIN : SUPERIOR
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 500

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	0.24	0.27	0.23	0.29	0.20	0.30	0.29	0.30	0.26	0.27	0.23	0.20	0.26	
BOD5														
INFLUENT (MG/L)	190.0	115.0	195.0	140.0	82.0	86.0	130.0	62.0	150.0	145.0	ND	108.0	127.5	
EFFLUENT (MG/L)	4.7	7.6	7.6	14.0	4.8	3.0	1.8	3.1	6.8	38.0	ND	5.0	8.8	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	1.12	2.05	1.74	4.06	0.96	0.90	0.52	0.93	1.76	10.26	ND	1.00	2.29	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	310.0	140.0	280.0	230.0	140.0	90.0	100.0	100.0	180.0	140.0	ND	140.0	168.2	
EFFLUENT (MG/L)	4.0	15.0	10.0	20.0	5.0	9.0	4.0	4.0	40.0	19.0	ND	7.0	12.5	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	0.96	4.05	2.30	5.80	1.00	2.70	1.16	1.20	10.40	5.13	ND	1.40	3.25	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	11.0	7.0	14.0	7.5	4.8	5.5	5.6	5.0	4.7	5.7	ND	6.9	7.1	
EFFLUENT (MG/L)	3.5	3.9	3.3	3.5	ND	3.0	4.2	3.6	4.4	6.9	ND	3.7	4.0	
CONCENTRATION LIMIT (MG/L)														
LOADING (KG/D)	0.84	1.05	0.75	1.01	ND	0.90	1.21	1.08	1.14	1.86	ND	0.74	1.04	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	NA	NO DIRECT DISCHARGE
SS	NA	NO DIRECT DISCHARGE
TP	NA	NO DIRECT DISCHARGE

NOTE:
BOD - HAS NO CRITERIA
SS - HAS NO CRITERIA
TP - HAS NO CRITERIA
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

NO REMEDIAL MEASURES REPORTED

1989 EFFLUENT GUIDELINES ASSESSMENT

MUNICIPALITY : THUNDER BAY
PLANT : THUNDER BAY WPCP
WORKS NUMBER : 120004805
TREATMENT : PRIMARY
: PHOSPHORUS REMOVAL-CONTINUOUS
:
DESIGN CAPACITY : 109.10 (1000 M3)

REGION : NORTHWEST
DISTRICT : THUNDER BAY
OPERATING AUTHORITY : MUNICIPAL
WATERCOURSE : KAMINISTIKWIA RIVER
MINOR BASIN : SUPERIOR
MAJOR BASIN : GREAT LAKES
POPULATION SERVED : 101,527

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	NUMBER EXCEED
AVG. DAILY FLOW (1000 M3)	78.88	64.00	63.30	90.58	93.54	92.62	79.64	83.58	85.17	72.82	69.59	63.89	78.13	
BOD5														
INFLUENT (MG/L)	166.0	169.0	172.0	144.0	107.0	136.0	177.0	168.0	161.0	173.0	146.0	176.0	157.9	
EFFLUENT (MG/L)	65.5	76.2	103.5	41.0	50.0	60.8	53.0	61.4	69.2	69.8	64.8	86.8	66.8	
LOADING (KG/D)	5166.64	4876.80	6551.55	3713.78	4677.00	5631.29	4220.92	5131.81	5893.76	5082.83	4509.43	5545.65	5219.08	
PERCENT REMOVAL	61	55	40	72	53	55	70	63	57	60	56	51	58	
PERCENT REMOVAL LIMITS													50	
SUSPENDED SOLIDS														
INFLUENT (MG/L)	190.0	154.0	186.0	200.0	192.0	194.0	289.0	258.0	174.0	295.0	210.0	253.0	216.3	
EFFLUENT (MG/L)	83.7	77.3	97.5	79.0	70.0	63.6	62.5	54.9	51.3	65.3	68.7	76.3	70.8	
LOADING (KG/D)	6602.25	4947.20	6171.75	7155.82	6547.80	5890.63	4977.50	4588.54	4369.22	4755.14	4780.83	4874.80	5531.60	
PERCENT REMOVAL	56	50	48	61	64	67	78	79	71	78	67	70	67*	
PERCENT REMOVAL LIMITS													70	
TOTAL PHOSPHOROUS														
INFLUENT (MG/L)	4.3	4.4	4.6	4.2	3.9	3.8	5.0	4.1	4.4	5.9	5.0	5.1	4.6	
EFFLUENT (MG/L)	1.4*	1.6*	2.8*	0.8	0.7	1.2*	0.9	0.8	1.2*	1.9*	1.6*	1.7*	1.4	8
CONCENTRATION LIMIT (MG/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
LOADING (KG/D)	110.43	102.40	177.24	72.46	65.47	111.14	71.67	66.86	102.20	138.35	111.34	108.61	109.38	

SUMMARY

PARM	CRITERIA	COMPLIES WITH CONC
BOD	50%	YES
SS	70%	NO
TP	1.0 MG/L	NO

NOTE:
BOD - ASSESSED ANNUALLY
SS - ASSESSED ANNUALLY
TP - ASSESSED ANNUALLY
* - EXCEEDS EFFLUENT CRITERIA
SPACE (EG. " ") INDICATES A VALUE OF ZERO
ND - NO DATA
NA - NOT APPLICABLE

REMEDIAL MEASURES	START DATE	END DATE	ANTICIPATED COMPLIANCE
OPERATIONAL/PROCESS - SAMPLING PROGRAM BEING MODIFIED	1990/03	1990/04	
EQUIPMENT/MAINTENANCE - NEW EQUIPMENT BEING INSTALLED	1990/03	1990/04	
FACILITY EXPANSION/UPGRADING - UPGRADING TO SECONDARY TREATMENT	1990/03	1995/03	
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APPENDIX D

SEWAGE TREATMENT PLANT
PRIMARY AND SECONDARY BYPASS DATA
FOR 1989

ABBREVIATIONS FOR APPENDIX D

Hrs. ..... Hours

No of Times ..... Number of Bypass Occurrences

1000 m^3 ..... Thousands of Cubic Meters

WPCP ..... Water Pollution Control Plant
(same as STP)

SOUTHWEST REGION

1989 BYPASS OCCURRENCES

MUNICIPALITY : GODERICH
PLANT : GODERICH WPCP
WORKS NUMBER : 120000943
WATERCOURSE : LAKE HURON

REGION : SOUTHWEST
DISTRICT : HURON
OP AUTHORITY : MUNICIPAL
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 9.092
POPULATION SERVED : 7,400
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL-CONTINUOUS
:

	PLANT BYPASS			SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN		1.0			1.0	
FEB						
MAR		1.0			1.0	
APR						
MAY		2.8			2.8	
JUN		1.0			1.0	
JUL						
AUG		9.0			9.0	
SEP		1.9			1.9	
OCT		2.0			2.0	
NOV		1.0			1.0	
DEC						
TOTAL	0.00	19.7	0	0.00	19.7	0
OBSERVATIONS	0	8.0	0	0	8.0	0
PERCENTAGE OF PLANT EFFLUENT	0.00%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : LEAMINGTON
PLANT : LEAMINGTON WPCP
WORKS NUMBER : 120001069
WATERCOURSE : LAKE ERIE

REGION : SOUTHWEST
DISTRICT : ESSEX
OP AUTHORITY : MUNICIPAL
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 19.093
POPULATION SERVED : 12,600
TREATMENT : EXTENDED AERATION
: PHOSPHORUS REMOVAL-CONTINUOUS
:

	PLANT BYPASS			SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN						
FEB						
MAR	1.00	6.0	6	0.00	0.0	0
APR						
MAY						
JUN						
JUL						
AUG						
SEP						
OCT						
NOV						
DEC						
TOTAL	1.00	6.0	6	0.00	0.0	0
OBSERVATIONS	1	1.0	1	1	1.0	1
PERCENTAGE OF PLANT EFFLUENT	0.01%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : LONDON
PLANT : GREENWAY WPCP
WORKS NUMBER : 120000863
WATERCOURSE : THAMES RIVER

REGION : SOUTHWEST
DISTRICT : MIDDLESEC
OP AUTHORITY : MUNICIPAL
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 124.333
POPULATION SERVED : 168,274
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL-CONTINUOUS
:

	PLANT BYPASS			SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN				9.27	23.0	9
FEB						
MAR				53.50	14.6	4
APR				39.77	46.1	12
MAY				15.54	17.1	8
JUN				25.20	15.4	9
JUL				2.38	8.0	3
AUG	10.57	58.5	5			
SEP				10.33	4.6	9
OCT				5.68	16.8	2
NOV				57.05	56.9	10
DEC				21.35	10.8	1
TOTAL	10.57	58.5	5	240.10	213.3	67
OBSERVATIONS	1	1.0	1	10	10.0	10
PERCENTAGE OF PLANT EFFLUENT	0.02%			0.54%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : LONDON
PLANT : POTTERSBURG WPCP
WORKS NUMBER : 120000836
WATERCOURSE : THAMES RIVER

REGION : SOUTHWEST
DISTRICT : MIDDLESEC
OP AUTHORITY : MUNICIPAL
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 22.048
POPULATION SERVED : 25,653
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL-CONTINUOUS
:

	PLANT BYPASS			SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN	1.66	11.0	2			
FEB						
MAR	4.85	9.0	2			
APR	1.02	19.0	6			
MAY	1.35	1.5	1			
JUN	0.65	1.0	1			
JUL						
AUG						
SEP	0.04	0.3	2			
OCT						
NOV	1.29	4.0	4			
DEC	0.45	5.0	1			
TOTAL	11.32	50.8	19	0.00	0.0	0
OBSERVATIONS	8	8.0	8	0	0.0	0
PERCENTAGE OF PLANT EFFLUENT	0.19%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : LONDON
PLANT : VAUXHALL WPCP
WORKS NUMBER : 120000845
WATERCOURSE : THAMES RIVER

REGION : SOUTHWEST
DISTRICT : MIDDLESEC
OP AUTHORITY : MUNICIPAL
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 20.912
POPULATION SERVED : 22,981
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL-CONTINUOUS
:

	PLANT BYPASS			SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN						
FEB						
MAR						
APR						
MAY						
JUN						
JUL						
AUG						
SEP						
OCT						
NOV	0.00		4	0.00		0
DEC						
TOTAL	0.00	0.0	4	0.00	0.0	0
OBSERVATIONS	1	0.0	1	1	0.0	1
PERCENTAGE OF PLANT EFFLUENT	0.00%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : MAIDSTONE
PLANT : BELLE RIVER-MAIDSTONE WPCP
WORKS NUMBER : 110002078
WATERCOURSE : LAKE ST.CLAIR

REGION : SOUTHWEST
DISTRICT : ESSEX
OP AUTHORITY : MINISTRY OF THE ENVIRONMENT
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 6.819
POPULATION SERVED : 8,568
TREATMENT : EXTENDED AERATION
: PHOSPHORUS REMOVAL-CONTINUOUS
:

	PLANT BYPASS			SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN						
FEB	0.00	0.0	0	0.00	0.0	0
MAR	0.00	0.0	0	0.00	0.0	0
APR	0.00	0.0	0	0.00	0.0	0
MAY	0.00	0.0	0	0.00	0.0	0
JUN	6.81	10.0	1	0.00	0.0	0
JUL	75.65	80.5	5	0.00	0.0	0
AUG	0.00	0.0	0	0.00	0.0	0
SEP	0.00	0.0	0	0.00	0.0	0
OCT	0.00	0.0	0	0.00	0.0	0
NOV	0.00	0.0	0	0.00	0.0	0
DEC	0.00	0.0	0	0.00	0.0	0
TOTAL	82.47	90.5	6	0.00	0.0	0
OBSERVATIONS	11	11.0	11	11	11.0	11
PERCENTAGE OF PLANT EFFLUENT	4.46%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : OWEN SOUND
PLANT : OWEN SOUND WPCP
WORKS NUMBER : 110000551
WATERCOURSE : GEORGIAN BAY

REGION : SOUTHWEST
DISTRICT : GREY
OP AUTHORITY : MINISTRY OF THE ENVIRONMENT
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 24.548
POPULATION SERVED : 20,000
TREATMENT : PRIMARY
: PHOSPHORUS REMOVAL-CONTINUOUS
:

	PLANT BYPASS			SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN	0.00	0.0	0	0.00	0.0	0
FEB	0.00	0.0	0	0.00	0.0	0
MAR	3.68	9.0	1	0.00	0.0	0
APR	0.00	0.0	0	0.00	0.0	0
MAY	0.00	0.0	0	0.00	0.0	0
JUN	0.00	0.0	0	0.00	0.0	0
JUL	0.00	0.0	0	0.00	0.0	0
AUG	0.00	0.0	0	0.00	0.0	0
SEP	0.00	0.0	0	0.00	0.0	0
OCT	0.00	0.0	0	0.00	0.0	0
NOV	0.69	2.0	1	0.00	0.0	0
DEC	0.00	0.0	0	0.00	0.0	0
TOTAL	4.37	11.0	2	0.00	0.0	0
OBSERVATIONS	12	12.0	12	12	12.0	12
PERCENTAGE OF PLANT EFFLUENT	0.09%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : PORT BURWELL
PLANT : PORT BURWELL WPCP
WORKS NUMBER : 110001319
WATERCOURSE : BIG OTTER CR.- LAKE ERIE

REGION : SOUTHWEST
DISTRICT : ELGIN
OP AUTHORITY : MINISTRY OF THE ENVIRONMENT
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 0.527
POPULATION SERVED : 780
TREATMENT : EXTENDED AERATION
: PHOSPHORUS REMOVAL-CONTINUOUS
:

	PLANT BYPASS			SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN	0.00	0.0	0	0.00	0.0	0
FEB	0.00	0.0	0	0.00	0.0	0
MAR	0.00	0.0	0	0.00	0.0	0
APR	0.00	0.0	0	0.00	0.0	0
MAY	0.00	0.0	0	0.00	0.0	0
JUN	0.00	0.0	1	0.00	0.0	0
JUL	0.00	0.0	0	0.00	0.0	0
AUG	0.00	0.0	0	0.00	0.0	0
SEP	0.00	0.0	0	0.00	0.0	0
OCT	0.00	0.0	0	0.00	0.0	0
NOV	0.00	0.0	0	0.00	0.0	0
DEC	0.00	0.0	0	0.00	0.0	0
TOTAL	0.00	0.0	1	0.00	0.0	0
OBSERVATIONS	12	12.0	12	12	12.0	12
PERCENTAGE OF PLANT EFFLUENT	0.00%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : PORT ELGIN
PLANT : PORT ELGIN WPCP
WORKS NUMBER : 120001470
WATERCOURSE : SAUGEEN RIVER

REGION : SOUTHWEST
DISTRICT : BRUCE
OP AUTHORITY : MUNICIPAL
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 6.455
POPULATION SERVED : 6,115
TREATMENT : OXIDATION DITCH
:
:

	PLANT BYPASS			SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN	0.00	0.0	0	0.00	0.0	0
FEB	0.00	0.0	0	0.00	0.0	0
MAR	113.14	3.3	1	0.00	0.0	0
APR	0.00	0.0	0	0.00	0.0	0
MAY	0.00	0.0	0	0.00	0.0	0
JUN	0.00	0.0	0	0.00	0.0	0
JUL	0.00	0.0	0	0.00	0.0	0
AUG	0.00	0.0	0	0.00	0.0	0
SEP	0.00	0.0	0			
OCT	0.00		0			
NOV	0.00	0.3	1	0.00	0.0	0
DEC	0.00	0.0	0	0.00	0.0	0
TOTAL	113.14	3.6	2	0.00	0.0	0
OBSERVATIONS	12	11.0	12	10	10.0	10
PERCENTAGE OF PLANT EFFLUENT	0.01%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : STEPHEN
PLANT : HURON PARK WPCP
WORKS NUMBER : 110003488
WATERCOURSE : AUSABLE RIVER

REGION : SOUTHWEST
DISTRICT : HURON
OP AUTHORITY : MINISTRY OF THE ENVIRONMENT
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 1.818
POPULATION SERVED : 1,400
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
:
:

	PLANT BYPASS			SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN	0.54	20.0	3	0.00	0.0	0
FEB	0.00	0.0	0	0.00	0.0	0
MAR	0.39	15.0	5	0.00	0.0	0
APR	0.00	0.0	0	0.00	0.0	0
MAY	0.00	0.0	0	0.00	0.0	0
JUN	0.00	0.0	0	0.00	0.0	0
JUL	0.00	0.0	0	0.00	0.0	0
AUG	0.00	0.0	0	0.00	0.0	0
SEP	0.00	0.0	0	0.00	0.0	0
OCT	0.00	0.0	0	0.00	0.0	0
NOV	0.00	0.0	0	0.00	0.0	0
DEC	0.00	0.0	0	0.00	0.0	0
TOTAL	0.93	35.0	8	0.00	0.0	0
OBSERVATIONS	12	12.0	12	12	12.0	12
PERCENTAGE OF PLANT EFFLUENT	0.23%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : STRATFORD
PLANT : STRATFORD WPCP
WORKS NUMBER : 110000702
WATERCOURSE : AVON RIVER

REGION : SOUTHWEST
DISTRICT : PERTH
OP AUTHORITY : MINISTRY OF THE ENVIRONMENT
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 27.276
POPULATION SERVED : 26,078
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL-CONTINUOUS
: EFFLUENT POLISHING

	PLANT BYPASS			SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN	0.82	4.2	2	7.01	16.1	3
FEB	0.00	0.0	0	0.00	0.0	0
MAR	2.84	5.0	1	31.21	51.9	4
APR	0.00	0.0	0	3.93	28.8	4
MAY	0.00	0.0	0	1.55	1.4	1
JUN	3.40	3.9	1	24.38	28.5	4
JUL	0.18	0.6	1	0.01	0.8	1
AUG	0.00	0.0	0	0.00	0.0	0
SEP	0.00	0.0	0	0.09	1.0	1
OCT	2.25	2.2	1	5.25	5.6	2
NOV	4.75	4.6	1	46.65	54.4	4
DEC	0.00	0.0	0	0.00	0.0	0
TOTAL	14.26	20.5	7	120.12	188.5	24
OBSERVATIONS	12	12.0	12	12	12.0	12
PERCENTAGE OF PLANT EFFLUENT	0.18%			1.55%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : TUCKERSMITH
PLANT : VAN ASTRA WPCP
WORKS NUMBER : 110003013
WATERCOURSE : MUN DRAIN TO BAYFIELD R.

REGION : SOUTHWEST
DISTRICT : HURON
OP AUTHORITY : MINISTRY OF THE ENVIRONMENT
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 1.405
POPULATION SERVED : 770
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL-CONTINUOUS
:

	PLANT BYPASS			SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN	0.00	0.0	0	0.00	0.0	0
FEB	0.00	0.0	0	0.00	0.0	0
MAR	0.00	0.0	0	0.00	0.0	0
APR	0.00	0.0	0	0.00	0.0	0
MAY	0.00	0.0	0	0.00	0.0	0
JUN	0.00	0.0	0	0.00	0.0	0
JUL	0.00	0.0	0	0.00	0.0	0
AUG	0.00	0.0	0	0.00	0.0	0
SEP	0.00	0.0	0	0.00	0.0	0
OCT	0.00	0.0	0	0.00	0.0	0
NOV	0.00	5.0	0	0.00	0.0	0
DEC	0.00	0.0	0	0.00	0.0	0
TOTAL	0.00	5.0	0	0.00	0.0	0
OBSERVATIONS	12	12.0	12	12	12.0	12
PERCENTAGE OF PLANT EFFLUENT	0.00%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : WALKERTON
PLANT : WALKERTON WPCP
WORKS NUMBER : 120001489
WATERCOURSE : SAUGEEN RIVER

REGION : SOUTHWEST
DISTRICT : BRUCE
OP AUTHORITY : MUNICIPAL
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 7.546
POPULATION SERVED : 4,591
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL-CONTINUOUS
:

	PLANT BYPASS			SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN	0.00		0	0.00		0
FEB						
MAR	0.75	7.9	3	0.00	0.0	0
APR	0.00		0	0.00		0
MAY	0.00	0.0	0	0.00	0.0	0
JUN	0.00	0.0	0	0.00	0.0	0
JUL						
AUG	0.00		0	0.00		0
SEP	0.00	0.0	0	0.00	0.0	0
OCT						
NOV	0.00	0.0	0	0.00	0.0	0
DEC						
TOTAL	0.75	7.9	3	0.00	0.0	0
OBSERVATIONS	8	5.0	8	8	5.0	8
PERCENTAGE OF PLANT EFFLUENT	0.04%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : WALLACEBURG
PLANT : WALLACEBURG WPCP
WORKS NUMBER : 110000784
WATERCOURSE : SYDENHAM RIVER

REGION : SOUTHWEST
DISTRICT : KENT
OP AUTHORITY : MINISTRY OF THE ENVIRONMENT
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 6.819
POPULATION SERVED : 10,056
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL-CONTINUOUS
:

	PLANT BYPASS			SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN	0.00	0.0	0	0.00	0.0	0
FEB	0.00	0.0	0	0.00	0.0	0
MAR	0.00	0.0	0	0.00	0.0	0
APR	0.00	0.0	0	0.00	0.0	0
MAY	0.00	1.8	0	0.00	0.0	0
JUN	0.00	14.9	0	0.00	0.0	0
JUL	0.00	0.3	0	0.00	0.0	0
AUG	0.00	4.0	0	0.00	0.0	0
SEP	0.00	3.3	0	0.00	0.0	0
OCT	0.00	0.0	0	0.00	0.0	0
NOV	0.00	0.6	0	0.00	0.0	0
DEC	0.00	0.0	0	0.00	0.0	0
TOTAL	0.00	24.9	0	0.00	0.0	0
OBSERVATIONS	12	12.0	12	12	12.0	12
PERCENTAGE OF PLANT EFFLUENT	0.00%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : WINDSOR
PLANT : LITTLE RIVER WPCP
WORKS NUMBER : 120001096
WATERCOURSE : LITTLE RIVER

REGION : SOUTHWEST
DISTRICT : ESSEX
OP AUTHORITY : MUNICIPAL
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 36.368
POPULATION SERVED : 64,000
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL-CONTINUOUS
:

	PLANT BYPASS			SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN	47.90	101.0	15			
FEB	0.00	0.0	0			
MAR	43.40	129.0	11			
APR	101.50	193.0	13			
MAY	8.10	17.0	1			
JUN	0.00	0.0	0			
JUL	108.70	82.0	4			
AUG	0.00	0.0	0			
SEP	5.20	1.0	1			
OCT	0.00	0.0	0			
NOV	0.00	0.0	0			
DEC	9.40	20.0	1			
TOTAL	324.20	543.0	46	0.00	0.0	0
OBSERVATIONS	12	12.0	12	0	0.0	0
PERCENTAGE OF PLANT EFFLUENT	2.40%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : WINDSOR
PLANT : WESTERLY WPCP
WORKS NUMBER : 120001103
WATERCOURSE : DETROIT RIVER

REGION : SOUTHWEST
DISTRICT : ESSEX
OP AUTHORITY : MUNICIPAL
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 163.656
POPULATION SERVED : 123,000
TREATMENT : PRIMARY
: PHOSPHORUS REMOVAL-CONTINUOUS
:

	PLANT BYPASS			SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN	2.10	2.0	1			
FEB	0.00	0.0	0			
MAR	15.33	5.0	1			
APR	37.30	8.0	2			
MAY	25.40	7.0	2			
JUN	34.90	11.0	3			
JUL	117.70	26.0	3			
AUG	5.80	2.0	2			
SEP	36.10	13.0	5			
OCT	42.20	13.0	3			
NOV	14.20	5.0	1			
DEC	3.50	2.0	1			
TOTAL	334.53	94.0	24	0.00	0.0	0
OBSERVATIONS	12	12.0	12	0	0.0	0
PERCENTAGE OF PLANT EFFLUENT	0.78%			0.00%		

WEST CENTRAL REGION

1989 BYPASS OCCURRENCES

MUNICIPALITY : BRANTFORD
PLANT : BRANTFORD WPCP
WORKS NUMBER : 110000043
WATERCOURSE : GRAND RIVER

REGION : WEST CENTRAL
DISTRICT : BRANT
OP AUTHORITY : MINISTRY OF THE ENVIRONMENT
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 81.818
POPULATION SERVED : 73,000
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL-CONTINUOUS
:

	PLANT BYPASS			SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN	0.00	0.0	0			
FEB						
MAR	0.00	0.0	0			
APR	0.00	0.0	0			
MAY	0.00	0.0	0			
JUN	1700.00	2.8	1			
JUL	0.00	0.0	0			
AUG	0.00	0.0	0			
SEP	0.00	0.0	0			
OCT	0.00	0.0	0			
NOV	0.00	0.0	0			
DEC	0.00	0.0	0			
TOTAL	1,700.00	2.8	1	0.00	0.0	0
OBSERVATIONS	11	11.0	11	0	0.0	0
PERCENTAGE OF PLANT EFFLUENT	9.92%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : CAMBRIDGE
PLANT : GALT WPCP
WORKS NUMBER : 110000276
WATERCOURSE : GRAND RIVER

REGION : WEST CENTRAL
DISTRICT :
OP AUTHORITY : MINISTRY OF THE ENVIRONMENT
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 38.641
POPULATION SERVED : 50,143
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL-CONTINUOUS
:

	PLANT BYPASS			SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN						
FEB						
MAR	0.14	0.5	0			
APR						
MAY	0.00	0.0	0	0.00	0.0	0
JUN	0.00	0.0	0			
JUL	0.00	0.0	0			
AUG	0.00	0.0	1			
SEP	0.00	0.0	0			
OCT						
NOV	0.00	0.0	1			
DEC	0.00	0.0	0			
TOTAL	0.14	0.5	2	0.00	0.0	0
OBSERVATIONS	8	8.0	8	1	1.0	1
PERCENTAGE OF PLANT EFFLUENT	0.00%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : CAMBRIDGE
PLANT : HESPELER WPCP
WORKS NUMBER : 110001033
WATERCOURSE : SPEED RIVER

REGION : WEST CENTRAL
DISTRICT :
OP AUTHORITY : MINISTRY OF THE ENVIRONMENT
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 9.319
POPULATION SERVED : 11,392
TREATMENT : HIGH RATE
: PHOSPHORUS REMOVAL-CONTINUOUS
:

	PLANT BYPASS			SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN	0.00	0.0	0	0.00	0.0	0
FEB	0.00	0.0	0	0.00	0.0	0
MAR	0.00	0.0	0	0.00	0.0	0
APR	0.00	0.0	0	0.00	0.0	0
MAY	0.00	0.0	1	0.00	0.0	1
JUN	0.00	0.0	0	0.00	0.0	0
JUL	0.00	0.0	0	0.00	0.0	0
AUG	0.00	0.0	0	0.00	0.0	0
SEP	0.00	0.0	0	0.00	0.0	0
OCT	0.00	0.0	0	0.00	0.0	0
NOV						
DEC						
TOTAL	0.00	0.0	1	0.00	0.0	1
OBSERVATIONS	10	10.0	10	10	10.0	10
PERCENTAGE OF PLANT EFFLUENT	0.00%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : DELHI
PLANT : DELHI WPCP
WORKS NUMBER : 120001425
WATERCOURSE : BIG CREEK

REGION : WEST CENTRAL
DISTRICT : HALDIMAN-NORFOLK, REG. MUN.
OP AUTHORITY : MINISTRY OF THE ENVIRONMENT
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 3.182
POPULATION SERVED : 4,257
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL-CONTINUOUS
: AEROBIC SINGLE STAGE

	PLANT BYPASS			SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN						
FEB						
MAR						
APR						
MAY						
JUN						
JUL						
AUG						
SEP	0.00	0.0	30	0.00	0.0	30
OCT	0.00	0.0	31	0.00	0.0	31
NOV						
DEC						
TOTAL	0.00	0.0	61	0.00	0.0	61
OBSERVATIONS	2	2.0	2	2	2.0	2
PERCENTAGE OF PLANT EFFLUENT	0.00%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : DUNNVILLE
PLANT : DUNNVILLE WPCP
WORKS NUMBER : 120001443
WATERCOURSE : GRAND RIVER

REGION : WEST CENTRAL
DISTRICT : HALDIMAN-NORFOLK, REG. MUN.
OP AUTHORITY : MINISTRY OF THE ENVIRONMENT
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 7.728
POPULATION SERVED : 5,182
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL-CONTINUOUS
:

	PLANT BYPASS			SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN						
FEB						
MAR						
APR						
MAY						
JUN	0.00		1			
JUL						
AUG						
SEP						
OCT		0.7				
NOV						
DEC						
TOTAL	0.00	0.7	1	0.00	0.0	0
OBSERVATIONS	1	1.0	1	0	0.0	0
PERCENTAGE OF PLANT EFFLUENT	0.00%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : FERGUS
PLANT : FERGUS WPCP
WORKS NUMBER : 110000249
WATERCOURSE : GRAND RIVER

REGION : WEST CENTRAL
DISTRICT : WELLINGTON
OP AUTHORITY : MINISTRY OF THE ENVIRONMENT
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 5.001
POPULATION SERVED : 6,050
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL-CONTINUOUS
:

	PLANT BYPASS			SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN						
FEB						
MAR	0.08	0.5	1			
APR						
MAY						
JUN	0.11	2.8	1			
JUL						
AUG	0.00	0.0	0	0.00	0.0	0
SEP	0.00	0.0	1	0.00	0.0	1
OCT	0.00	0.0	0	0.00	0.0	0
NOV	0.04	1.5	1			
DEC						
TOTAL	0.23	4.8	4	0.00	0.0	1
OBSERVATIONS	6	6.0	6	3	3.0	3
PERCENTAGE OF PLANT EFFLUENT	0.02%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : FORT ERIE
PLANT : ANGER AVE.WPCP
WORKS NUMBER : 120001292
WATERCOURSE : NIAGARA RIVER

REGION : WEST CENTRAL
DISTRICT : NIAGARA, REG. MUN.
OP AUTHORITY : MUNICIPAL
MINOR BASIN : ONTARIO
MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 16.366
POPULATION SERVED : 13,765
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL-CONTINUOUS
:

	PLANT BYPASS			SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN						
FEB						
MAR						
APR						
MAY		0.7				
JUN		0.7				
JUL						
AUG						
SEP						
OCT						
NOV						
DEC						
TOTAL	0.00	1.4	0	0.00	0.0	0
OBSERVATIONS	0	2.0	0	0	0.0	0
PERCENTAGE OF PLANT EFFLUENT	0.00%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : FORT ERIE
PLANT : CRYSTAL BEACH WPCP
WORKS NUMBER : 120001283
WATERCOURSE : LAKE ERIE

REGION : WEST CENTRAL
DISTRICT : NIAGARA, REG. MUN.
OP AUTHORITY : MUNICIPAL
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 3.887
POPULATION SERVED : 4,095
TREATMENT : EXTENDED AERATION
: PHOSPHORUS REMOVAL-CONTINUOUS
:

	PLANT BYPASS			SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN						
FEB						
MAR						
APR						
MAY				18.10		1
JUN				28.30		1
JUL				0.09		1
AUG				44.00		1
SEP				1.16		1
OCT				0.24		1
NOV				5.20		1
DEC						
TOTAL	0.00	0.0	0	97.09	0.0	7
OBSERVATIONS	0	0.0	0	7	0.0	7
PERCENTAGE OF PLANT EFFLUENT	0.00%			7.51%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : GRAND VALLEY
PLANT : GRAND VALLEY WPCP
WORKS NUMBER : 110000301
WATERCOURSE : GRAND RIVER

REGION : WEST CENTRAL
DISTRICT : DUFFERIN
OP AUTHORITY : MINISTRY OF THE ENVIRONMENT
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 0.600
POPULATION SERVED : 1,060
TREATMENT : OXIDATION DITCH
: PHOSPHORUS REMOVAL-CONTINUOUS
:

	PLANT BYPASS			SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN						
FEB						
MAR						
APR						
MAY						
JUN						
JUL						
AUG	0.00	0.0	0	0.00	0.0	0
SEP	0.00	0.0	30	0.00	0.0	30
OCT	0.00	0.0	0	0.00	0.0	0
NOV						
DEC						
TOTAL	0.00	0.0	30	0.00	0.0	30
OBSERVATIONS	3	3.0	3	3	3.0	3
PERCENTAGE OF PLANT EFFLUENT	0.00%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : HALDIMAND
PLANT : CALEDONIA WPCP
WORKS NUMBER : 120001452
WATERCOURSE : GRAND RIVER

REGION : WEST CENTRAL
DISTRICT : HALDIMAN-NORFOLK, REG. MUN.
OP AUTHORITY : MINISTRY OF THE ENVIRONMENT
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 2.273
POPULATION SERVED : 5,655
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL-CONTINUOUS
:

	PLANT BYPASS			SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN	0.00	0.0	0	0.00	0.0	0
FEB	0.00	0.0	0	0.00	0.0	0
MAR	0.00	0.0	0	0.00	0.0	0
APR	0.00	0.0	0	0.79	3.5	1
MAY	0.00	0.0	0	1.15	4.3	1
JUN	0.00	0.0	0	0.00	0.0	0
JUL	0.00	0.0	0	2.87	12.8	1
AUG	0.00	0.0	0	0.00	0.0	0
SEP	0.00	0.0	0	2.75	11.0	1
OCT	0.00	0.0	0	0.00	0.0	0
NOV						
DEC						
TOTAL	0.00	0.0	0	7.57	31.6	4
OBSERVATIONS	10	10.0	10	10	10.0	10
PERCENTAGE OF PLANT EFFLUENT	0.00%			0.82%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : HALDIMAND
PLANT : CAYUGA WPCP
WORKS NUMBER : 110000089
WATERCOURSE : GRAND RIVER

REGION : WEST CENTRAL
DISTRICT : HALDIMAN-NORFOLK, REG. MUN.
OP AUTHORITY : MINISTRY OF THE ENVIRONMENT
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 0.909
POPULATION SERVED : 1,258
TREATMENT : OXIDATION DITCH
: PHOSPHORUS REMOVAL-CONTINUOUS
:

	PLANT BYPASS			SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN	0.00	0.0	0	0.28	7.0	1
FEB	0.00	0.0	0	0.00	0.0	0
MAR	0.00	0.0	0	0.00	0.0	0
APR	0.00	0.0	0	2.58	24.0	2
MAY	0.00	0.0	0	2.19	30.0	2
JUN	0.00	0.0	0	1.16	13.5	1
JUL	0.00	0.0	0	0.00	0.0	0
AUG	0.00	0.0	0	0.00	0.0	0
SEP	0.00	0.0	0	0.00	0.0	0
OCT	0.00	0.0	0	0.00	0.0	0
NOV				0.43	6.0	1
DEC						
TOTAL	0.00	0.0	0	6.66	80.5	7
OBSERVATIONS	10	10.0	10	11	11.0	11
PERCENTAGE OF PLANT EFFLUENT	0.00%			3.59%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : HALDIMAND
PLANT : HAGERSVILLE WPCP
WORKS NUMBER : 110001024
WATERCOURSE : SANDUSK CREEK

REGION : WEST CENTRAL
DISTRICT : HALDIMAN-NORFOLK, REG. MUN.
OP AUTHORITY : MINISTRY OF THE ENVIRONMENT
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 1.000
POPULATION SERVED : 2,268
TREATMENT : EXTENDED AERATION
: PHOSPHORUS REMOVAL-CONTINUOUS
: AEROBIC SINGLE STAGE

	PLANT BYPASS			SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN	0.00	0.0	0	0.00	0.0	0
FEB	0.00	0.0	0	0.00	0.0	0
MAR	0.00	0.0	0	0.00	0.0	0
APR	0.00	0.0	0	0.00	0.0	0
MAY	0.00	0.0	0	0.00	0.0	0
JUN	0.00	0.0	0	0.00	0.0	0
JUL	0.00	0.0	1	0.00	0.0	1
AUG	0.00	0.0	1	0.00	0.0	1
SEP	0.00	0.0	0	0.00	0.0	0
OCT	0.00	0.0	0	0.00	0.0	0
NOV						
DEC						
TOTAL	0.00	0.0	2	0.00	0.0	2
OBSERVATIONS	10	10.0	10	10	10.0	10
PERCENTAGE OF PLANT EFFLUENT	0.00%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : HAMILTON
PLANT : WOODWARD AVE.WPCP (OFFSITE
WORKS NUMBER : 120001504
WATERCOURSE : REDHILL CREEK

REGION : WEST CENTRAL
DISTRICT : HAMILTON-WENTWORTH, REG. MUN.
OP AUTHORITY : MUNICIPAL
MINOR BASIN : ONTARIO
MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 409.140
POPULATION SERVED : 300,000
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL-CONTINUOUS
:

	PLANT BYPASS			SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN		0.0			4.0	
FEB		0.0			0.0	
MAR		22.0			154.1	
APR		9.0			62.5	
MAY		25.5			141.9	
JUN		3.0			70.9	
JUL		0.0			19.4	
AUG		0.0			5.0	
SEP	15.20		4		37.1	
OCT		0.0			11.9	
NOV		13.5			67.5	
DEC		6.0			8.6	
TOTAL	15.20	79.0	4	0.00	582.9	0
OBSERVATIONS	1	11.0	1	0	12.0	0
PERCENTAGE OF PLANT EFFLUENT	0.01%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : KITCHENER
PLANT : KITCHENER WPCP
WORKS NUMBER : 110000374
WATERCOURSE : GRAND RIVER

REGION : WEST CENTRAL
DISTRICT :
OP AUTHORITY : MINISTRY OF THE ENVIRONMENT
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 122.742
POPULATION SERVED : 138,271
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL-CONTINUOUS
:

	PLANT BYPASS			SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN						
FEB						
MAR						
APR						
MAY	0.00		0			
JUN	0.00		0			
JUL	0.00		1			
AUG	0.00		0			
SEP	0.00		1			
OCT	204.00	240.0	8			
NOV	0.00		0			
DEC	0.00		1			
TOTAL	204.00	240.0	11	0.00	0.0	0
OBSERVATIONS	8	1.0	8	0	0.0	0
PERCENTAGE OF PLANT EFFLUENT	0.82%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : NANTICOKE
PLANT : PORT DOVER WPCP
WORKS NUMBER : 110000604
WATERCOURSE : LAKE ERIE

REGION : WEST CENTRAL
DISTRICT : HALDIMAN-NORFOLK, REG. MUN.
OP AUTHORITY : MINISTRY OF THE ENVIRONMENT
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 4.091
POPULATION SERVED : 4,750
TREATMENT : PRIMARY
: PHOSPHORUS REMOVAL-CONTINUOUS
:

	PLANT BYPASS			SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN						
FEB	0.00	0.0	0	0.00	0.0	28
MAR	0.00	0.0	0	0.00	0.0	0
APR	0.00	0.0	0			
MAY	0.00	0.0	0		0.0	
JUN	0.00	0.0	0			
JUL	0.00	0.0	0			
AUG	0.00	0.0	0			
SEP	0.00	0.0	0			
OCT	0.00	0.0	0	0.00		1
NOV	0.00	0.0	0	0.00	0.0	0
DEC	0.00	0.0	0	0.00	0.0	0
TOTAL	0.00	0.0	0	0.00	0.0	29
OBSERVATIONS	11	11.0	11	5	5.0	5
PERCENTAGE OF PLANT EFFLUENT	0.00%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : NIAGARA FALLS
PLANT : STAMFORD WPCP
WORKS NUMBER : 120001363
WATERCOURSE : CHIPPAWA POWER CANAL

REGION : WEST CENTRAL
DISTRICT : NIAGARA, REG. MUN.
OP AUTHORITY : MUNICIPAL
MINOR BASIN : ONTARIO
MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 58.189
POPULATION SERVED : 67,835
TREATMENT : ROTATING BIOLOGICAL CONTACTOR
: PHOSPHORUS REMOVAL-CONTINUOUS
:

	PLANT BYPASS			SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN						
FEB	10.90	2.7	1			
MAR	238.20	14.5	1			
APR	291.30	24.5	1			
MAY	592.00	70.3	1			
JUN						
JUL						
AUG	113.65	2.5	1			
SEP		15.5				
OCT		15.0				
NOV		11.5				
DEC		11.0				
TOTAL	1,246.05	167.5	5	0.00	0.0	0
OBSERVATIONS	5	9.0	5	0	0.0	0
PERCENTAGE OF PLANT EFFLUENT	6.05%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : ORANGEVILLE
PLANT : ORANGEVILLE WPCP
WORKS NUMBER : 110000542
WATERCOURSE : CREDIT RIVER

REGION : WEST CENTRAL
DISTRICT : DUFFERIN
OP AUTHORITY : MINISTRY OF THE ENVIRONMENT
MINOR BASIN : ONTARIO
MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 14.547
POPULATION SERVED : 16,515
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL-CONTINUOUS
: EFFLUENT POLISHING

	PLANT BYPASS			SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN						
FEB						
MAR						
APR						
MAY						
JUN						
JUL	0.00	0.0	31	0.00	0.0	31
AUG	0.00	0.0	0	0.00	0.0	0
SEP	0.00	0.0	0	0.00	0.0	0
OCT	0.00	0.0	0	0.00	0.0	0
NOV						
DEC						
TOTAL	0.00	0.0	31	0.00	0.0	31
OBSERVATIONS	4	4.0	4	4	4.0	4
PERCENTAGE OF PLANT EFFLUENT	0.00%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : SIMCOE
PLANT : SIMCOE WPCP
WORKS NUMBER : 110000677
WATERCOURSE : LYNN RIVER

REGION : WEST CENTRAL
DISTRICT : HALDIMAN-NORFOLK, REG. MUN.
OP AUTHORITY : MINISTRY OF THE ENVIRONMENT
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 15.456
POPULATION SERVED : 13,355
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL-CONTINUOUS
: EFFLUENT POLISHING

	PLANT BYPASS			SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN	0.00	0.0	31	0.00	0.0	31
FEB	0.00	0.0	27	0.00	0.0	27
MAR	0.00		31	0.00		31
APR	0.00		30			
MAY	0.00		31	0.00		31
JUN						
JUL	0.00		31	0.00		31
AUG	0.00		31	0.00		31
SEP	0.00		0	0.00		0
OCT	0.00		31	0.00		31
NOV	0.00		30			
DEC	0.00		31			
TOTAL	0.00	0.0	304	0.00	0.0	213
OBSERVATIONS	11	2.0	11	8	2.0	8
PERCENTAGE OF PLANT EFFLUENT	0.00%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : SOUTH DUMFRIES
PLANT : ST GEORGE PV WPCP
WORKS NUMBER : 110003415
WATERCOURSE : FAIRCHILD CREEK (W. BR)

REGION : WEST CENTRAL
DISTRICT : BRANT
OP AUTHORITY : MINISTRY OF THE ENVIRONMENT
MINOR BASIN : ERIE
MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 1.064
POPULATION SERVED : 500
TREATMENT : EXTENDED AERATION
: PHOSPHORUS REMOVAL-CONTINUOUS
: EFFLUENT POLISHING

	PLANT BYPASS			SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN						
FEB						
MAR	0.00	0.0	0	0.00	0.0	0
APR						
MAY						
JUN						
JUL						
AUG						
SEP	0.00		0			
OCT	0.00		0			
NOV	0.00		0			
DEC	0.00		0			
TOTAL	0.00	0.0	0	0.00	0.0	0
OBSERVATIONS	5	1.0	5	1	1.0	1
PERCENTAGE OF PLANT EFFLUENT	0.00%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : ST CATHARINES
PLANT : PORT DALHOUSIE WPCP
WORKS NUMBER : 120001327
WATERCOURSE : LAKE ONTARIO

REGION : WEST CENTRAL
DISTRICT : NIAGARA, REG. MUN.
OP AUTHORITY : MUNICIPAL
MINOR BASIN : ONTARIO
MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 61.371
POPULATION SERVED : 60,430
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL-CONTINUOUS
:

	PLANT BYPASS			SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN						
FEB						
MAR		14.0				
APR		16.0				
MAY		44.2				
JUN		16.5				
JUL		10.0				
AUG		2.0				
SEP		9.0				
OCT	9.50		4			
NOV		9.7				
DEC	10.00		1			
TOTAL	19.50	121.4	5	0.00	0.0	0
OBSERVATIONS	2	8.0	2	0	0.0	0
PERCENTAGE OF PLANT EFFLUENT	0.12%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : ST CATHARINES
PLANT : PORT WELLER WPCP
WORKS NUMBER : 120001318
WATERCOURSE : PORT WELLER HARBOUR

REGION : WEST CENTRAL
DISTRICT : NIAGARA, REG. MUN.
OP AUTHORITY : MUNICIPAL
MINOR BASIN : ONTARIO
MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 37.505
POPULATION SERVED : 75,690
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL-CONTINUOUS
:

	PLANT BYPASS			SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN						
FEB						
MAR						
APR						
MAY	141.11		1			
JUN						
JUL	11.53		1			
AUG	.55		1			
SEP	20.62		1			
OCT	2.79		1			
NOV	42.01		1			
DEC	.34		1			
TOTAL	219.98	0.0	7	0.00	0.0	0
OBSERVATIONS	7	0.0	7	0	0.0	0
PERCENTAGE OF PLANT EFFLUENT	15 %			0.00%		

CENTRAL REGION

1989 BYPASS OCCURRENCES

MUNICIPALITY : BOBCAYGEON
PLANT : BOBCAGEON WPCP(SUMM.POP.SERVED
WORKS NUMBER : 110002498
WATERCOURSE : BOBCAYGEON RIVER

REGION : CENTRAL
DISTRICT : VICTORIA
OP AUTHORITY : MINISTRY OF THE ENVIRONMENT
MINOR BASIN : ONTARIO
MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 3.055
POPULATION SERVED : 1,610
TREATMENT : EXTENDED AERATION
: PHOSPHORUS REMOVAL-CONTINUOUS
:

	PLANT BYPASS			SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN	0.00		31	0.00		31
FEB	0.00		28	0.00		28
MAR						
APR					0.0	
MAY						
JUN						
JUL	0.00	0.0	1	0.00	0.0	1
AUG	0.00	0.0	2	0.00	0.0	2
SEP	0.00	0.0	1	0.00	0.0	1
OCT	0.00	0.0	1	0.00	0.0	1
NOV	0.00	0.0	1	0.00	0.0	1
DEC	0.00		31	0.00		31
TOTAL	0.00	0.0	96	0.00	0.0	96
OBSERVATIONS	8	5.0	8	8	6.0	8
PERCENTAGE OF PLANT EFFLUENT	0.00%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : BURLINGTON
PLANT : SKYWAY WPCP
WORKS NUMBER : 110000070
WATERCOURSE : HAMILTON HARBOUR

REGION : CENTRAL
DISTRICT : HALTON, REG. MUN.
OP AUTHORITY : MUNICIPAL
MINOR BASIN : ONTARIO
MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 93.193
POPULATION SERVED : 120,100
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL-CONTINUOUS
:

	PLANT BYPASS			SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN	0.00		0	0.00		0
FEB				0.92		0
MAR						
APR				0.17		0
MAY				0.08		0
JUN				0.13		0
JUL				0.20		0
AUG				2.33	18.0	1
SEP				13.12		1
OCT				1.33	7.0	1
NOV				10.87	32.0	1
DEC						
TOTAL	0.00	0.0	0	29.18	57.0	4
OBSERVATIONS	1	0.0	1	10	3.0	10
PERCENTAGE OF PLANT EFFLUENT	0.00%			0.12%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : COLDWATER
PLANT : COLDWATER WPCP
WORKS NUMBER : 110001596
WATERCOURSE : COLDWATER RIVER

REGION : CENTRAL
DISTRICT : SIMCOE
OP AUTHORITY : MINISTRY OF THE ENVIRONMENT
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 0.546
POPULATION SERVED : 1,015
TREATMENT : EXTENDED AERATION
:
:

	PLANT BYPASS			SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN						
FEB						
MAR						
APR						
MAY	0.25	4.0	1			
JUN						
JUL						
AUG						
SEP						
OCT						
NOV						
DEC						
TOTAL	0.25	4.0	1	0.00	0.0	0
OBSERVATIONS	1	1.0	1	0	0.0	0
PERCENTAGE OF PLANT EFFLUENT	0.15%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : HALTON HILLS
PLANT : ACTON WPCP + LAGOON
WORKS NUMBER : 120001023
WATERCOURSE : BLACK CREEK

REGION : CENTRAL
DISTRICT : HALTON, REG. MUN.
OP AUTHORITY : MUNICIPAL
MINOR BASIN : ONTARIO
MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 4.546
POPULATION SERVED : 7,478
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL-CONTINUOUS
: EFFLUENT POLISHING

	PLANT BYPASS			SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN	0.00		0	0.00		0
FEB	0.00		0	0.00		0
MAR	0.00		0	0.00		0
APR	0.00		0	0.00		0
MAY	0.00		0	0.00		0
JUN	0.00		0	0.00		0
JUL	0.00	0.0	0			
AUG	0.00	0.0	0	0.00	0.0	0
SEP	127.00	148.0	3	35.40	6.3	3
OCT	0.00	0.0	0	0.00	0.0	0
NOV	0.00	0.0	0	0.00	0.0	0
DEC	0.00	0.0	0	0.00	0.0	0
TOTAL	127.00	148.0	3	35.40	6.3	3
OBSERVATIONS	12	6.0	12	11	5.0	11
PERCENTAGE OF PLANT EFFLUENT	13.52%			3.77%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : METRO TORONTO
PLANT : HUMBER WPCP (ETOBICOKE)
WORKS NUMBER : 120000382
WATERCOURSE : LAKE ONTARIO

REGION : CENTRAL
DISTRICT : METRO TORONTO, MUN. OF
OP AUTHORITY : MUNICIPAL
MINOR BASIN : ONTARIO
MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 409.140
POPULATION SERVED : 540,000
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL-CONTINUOUS
:

	PLANT BYPASS			SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN	0.00		0	0.00		0
FEB	0.00		0	0.00		0
MAR	0.00		0	0.00		0
APR	0.00	0.0	0	0.00		0
MAY	0.00		0	0.00		0
JUN	0.00	0.0	0	48.55	10.5	3
JUL	0.00		0	0.00		0
AUG	0.00		0	0.00		0
SEP	0.00	0.0	0	0.00		0
OCT	0.00		0	0.44	0.1	1
NOV	0.00		0	0.00		0
DEC	0.00		0	0.00		0
TOTAL	0.00	0.0	0	48.99	10.6	4
OBSERVATIONS	12	3.0	12	12	2.0	12
PERCENTAGE OF PLANT EFFLUENT	0.00%			0.03%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : METRO TORONTO
PLANT : MAIN WPCP (TORONTO)
WORKS NUMBER : 120000391
WATERCOURSE : LAKE ONTARIO

REGION : CENTRAL
DISTRICT : METRO TORONTO, MUN. OF
OP AUTHORITY : MUNICIPAL
MINOR BASIN : ONTARIO
MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 818.280
POPULATION SERVED : 1,250,000
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL-CONTINUOUS
:

	PLANT BYPASS			SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN	0.00		0	0.00		0
FEB	0.00		0	0.00		0
MAR	0.00		0	0.00		0
APR	0.00	0.0	0	0.00		0
MAY	0.00		0	0.00		0
JUN	0.00	0.0	0	2.60	9.5	2
JUL	0.00		0	0.40	2.0	1
AUG	0.00		0	0.30	1.0	1
SEP	0.40	4.5	1	4.50		1
OCT	0.00		0	0.10	4.6	1
NOV	0.00		0	1.66	6.5	2
DEC	0.00	0.0	0	0.00		0
TOTAL	0.40	4.5	1	9.56	23.6	8
OBSERVATIONS	12	4.0	12	12	5.0	12
PERCENTAGE OF PLANT EFFLUENT	0.00%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : MIDLAND
PLANT : MIDLAND WPCP
WORKS NUMBER : 110000463
WATERCOURSE : MIDLAND BAY

REGION : CENTRAL
DISTRICT : SIMCOE
OP AUTHORITY : MUNICIPAL
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 13.680
POPULATION SERVED : 12,538
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL-CONTINUOUS
:

	PLANT BYPASS			SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN	0.00		1	0.00		1
FEB	0.00		0	0.00		0
MAR	0.00		0	0.00		0
APR	0.00		0	0.00		0
MAY	0.00	0.0	0	0.00	0.0	0
JUN	0.00	0.0	0	0.00	0.0	0
JUL	0.00	0.0	0	0.00	0.0	0
AUG	0.00	0.0	0	0.00	0.0	0
SEP	0.00	0.0	0	0.00	0.0	0
OCT	0.00	0.0	0	0.00	0.0	0
NOV	0.00	0.0	0	0.00	0.0	0
DEC	0.00	0.0	0	0.00	0.0	0
TOTAL	0.00	0.0	1	0.00	0.0	1
OBSERVATIONS	12	8.0	12	12	8.0	12
PERCENTAGE OF PLANT EFFLUENT	0.00%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : MILTON
PLANT : MILTON WPCP
WORKS NUMBER : 120001014
WATERCOURSE : OAKVILLE CREEK

REGION : CENTRAL
DISTRICT : HALTON, REG. MUN.
OP AUTHORITY : MUNICIPAL
MINOR BASIN : ONTARIO
MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 12.911
POPULATION SERVED : 23,203
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL-CONTINUOUS
: EFFLUENT POLISHING

	PLANT BYPASS			SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN	0.00		0	0.00		0
FEB	0.00		0	0.00		0
MAR	0.00		0	0.00		0
APR	0.00		0	0.00		0
MAY	0.00		0	0.00		0
JUN	0.06		0	0.00		0
JUL	0.00	0.0	0	0.00	0.0	0
AUG	0.00	0.0	0	0.00	0.0	0
SEP	0.00		0	0.00		0
OCT	0.00	0.0	0	0.00	0.0	0
NOV	0.00	0.0	0	0.00	0.0	0
DEC	0.00	0.0	0	0.00	0.0	0
TOTAL	0.06	0.0	0	0.00	0.0	0
OBSERVATIONS	12	5.0	12	12	5.0	12
PERCENTAGE OF PLANT EFFLUENT	0.00%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : MISSISSAUGA
PLANT : CLARKSON WPCP SOUTH-PEEL
WORKS NUMBER : 110001328
WATERCOURSE : LAKE ONTARIO

REGION : CENTRAL
DISTRICT : PEEL, REG. MUN.
OP AUTHORITY : MINISTRY OF THE ENVIRONMENT
MINOR BASIN : ONTARIO
MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 109.104
POPULATION SERVED : 150,000
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL-CONTINUOUS
:

	PLANT BYPASS			SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN						
FEB						
MAR						
APR	36.40		1			
MAY						
JUN				4.54	1.0	1
JUL						
AUG						
SEP						
OCT						
NOV	0.00		2		0.0	
DEC						
TOTAL	36.40	0.0	3	4.54	1.0	1
OBSERVATIONS	2	0.0	2	1	2.0	1
PERCENTAGE OF PLANT EFFLUENT	0.12%			7.5%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : NEWCASTLE
PLANT : PORT DARLINGTON WPCP
WORKS NUMBER : 120003076
WATERCOURSE : LAKE ONTARIO

REGION : CENTRAL
DISTRICT : DURHAM, REG. MUN.
OP AUTHORITY : MUNICIPAL
MINOR BASIN : ONTARIO
MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 4.546
POPULATION SERVED : 12,831
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL-CONTINUOUS
:

	PLANT BYPASS			SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN						
FEB						
MAR						
APR	3.36	14.0	1			
MAY	4.32	24.0	1			
JUN	7.44	23.0	1			
JUL						
AUG						
SEP						
OCT						
NOV				3.16	46.0	3
DEC						
TOTAL	15.12	61.0	3	3.16	46.0	3
OBSERVATIONS	3	3.0	3	1	1.0	1
PERCENTAGE OF PLANT EFFLUENT	0.49%			0.10%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : OAKVILLE
PLANT : SOUTH WEST WPCP
WORKS NUMBER : 120001005
WATERCOURSE : LAKE ONTARIO

REGION : CENTRAL
DISTRICT : HALTON, REG. MUN.
OP AUTHORITY : MUNICIPAL
MINOR BASIN : ONTARIO
MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 47.733
POPULATION SERVED : 58,200
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL-CONTINUOUS
:

	PLANT BYPASS			SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN						
FEB						
MAR						
APR						
MAY						
JUN						
JUL						
AUG						
SEP						
OCT				0.20	0.5	1
NOV						
DEC						
TOTAL	0.00	0.0	0	0.20	0.5	1
OBSERVATIONS	0	0.0	0	1	1.0	1
PERCENTAGE OF PLANT EFFLUENT	0.00%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : ORILLIA
PLANT : ORILLIA WPCP
WORKS NUMBER : 120000569
WATERCOURSE : LAKE SIMCOE

REGION : CENTRAL
DISTRICT : SIMCOE
OP AUTHORITY : MUNICIPAL
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 21.045
POPULATION SERVED : 24,000
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL-CONTINUOUS
:

	PLANT BYPASS			SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN						
FEB						
MAR	31.82	30.0	0	21.78	101.0	0
APR				48.00	222.5	0
MAY						
JUN	2.95	5.2	2	2.95	5.2	2
JUL						
AUG				0.04	1.0	1
SEP	3.38	4.0	1			
OCT				0.16	0.5	1
NOV				22.75	133.0	3
DEC						
TOTAL	38.15	39.2	3	95.70	463.2	7
OBSERVATIONS	3	3.0	3	6	6.0	6
PERCENTAGE OF PLANT EFFLUENT	0.52%			1.29%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : PENETANGUISHENE
PLANT : FOX ST. WPCP
WORKS NUMBER : 120001960
WATERCOURSE : PENETANGUISHENE HARBOUR

REGION : CENTRAL
DISTRICT : SIMCOE
OP AUTHORITY : MUNICIPAL
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 1.500
POPULATION SERVED : 2,100
TREATMENT : CONTACT STABILIZATION
: PHOSPHORUS REMOVAL-CONTINUOUS
:

	PLANT BYPASS			SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN						
FEB						
MAR						
APR						
MAY						
JUN						
JUL						
AUG						
SEP		0.7				
OCT						
NOV						
DEC						
TOTAL	0.00	0.7	0	0.00	0.0	0
OBSERVATIONS	0	1.0	0	0	0.0	0
PERCENTAGE OF PLANT EFFLUENT	0.00%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : PENETANGUISHENE
PLANT : PENETANGUISHENE WPCP MAIN ST
WORKS NUMBER : 120000541
WATERCOURSE : PENETANG BAY

REGION : CENTRAL
DISTRICT : SIMCOE
OP AUTHORITY : MUNICIPAL
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 3.000
POPULATION SERVED : 4,800
TREATMENT : CONTACT STABILIZATION
: PHOSPHORUS REMOVAL-CONTINUOUS
:

	PLANT BYPASS			SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN						
FEB						
MAR						
APR						
MAY						
JUN		16.0				
JUL						
AUG	1.50		1			
SEP		5.5				
OCT	0.00	0.7	2			
NOV		19.0				
DEC						
TOTAL	1.50	41.2	3	0.00	0.0	0
OBSERVATIONS	2	4.0	2	0	0.0	0
PERCENTAGE OF PLANT EFFLUENT	0.16%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : PETERBOROUGH
PLANT : PETERBOROUGH WPCP
WORKS NUMBER : 120000676
WATERCOURSE : OTONABEE RIVER

REGION : CENTRAL
DISTRICT : PETERBOROUGH
OP AUTHORITY : MUNICIPAL
MINOR BASIN : ONTARIO
MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 68.190
POPULATION SERVED : 62,945
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL-CONTINUOUS
:

	PLANT BYPASS			SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN	0.00		0	0.00		0
FEB	0.00		0	0.00		0
MAR	0.00		0	0.00		0
APR	0.00	0.0	0	0.00	0.0	0
MAY	0.00		0	2.08	6.0	1
JUN	0.00		0	4.86	15.0	3
JUL	0.00		0	0.00		0
AUG	0.00		1	12.50	7.0	1
SEP	0.00		0	26.52	15.0	2
OCT	0.00		0	1.70	4.5	1
NOV	0.00	0.0	1	30.50	60.0	5
DEC	0.00	0.0	0	0.00	0.0	0
TOTAL	0.00	0.0	2	78.18	107.5	13
OBSERVATIONS	12	3.0	12	12	8.0	12
PERCENTAGE OF PLANT EFFLUENT	0.00%			0.41%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : WHITBY
PLANT : CORBETT CREEK WPCP
WORKS NUMBER : 120000738
WATERCOURSE : LAKE ONTARIO

REGION : CENTRAL
DISTRICT : DURHAM, REG. MUN.
OP AUTHORITY : MUNICIPAL
MINOR BASIN : ONTARIO
MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 36.368
POPULATION SERVED : 26,100
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL-CONTINUOUS
:

	PLANT BYPASS			SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN	0.00	0.0	0	0.00	0.0	0
FEB	0.00	0.0	0	0.00	0.0	0
MAR	0.00	0.0	0	0.00	0.0	0
APR	0.00	0.0	0	0.00	0.0	0
MAY						
JUN	0.00	0.0	0	0.00	0.0	0
JUL						
AUG	0.00	0.0	0	0.00	0.0	0
SEP	1.23	5.0	1	0.00	0.0	1
OCT		0.0		0.00	0.0	0
NOV	0.00	0.0	0	122.27	7.0	2
DEC	0.00	0.0	0	0.00	0.0	0
TOTAL	1.23	5.0	1	122.27	7.0	3
OBSERVATIONS	9	10.0	9	10	10.0	10
PERCENTAGE OF PLANT EFFLUENT	0.01%			1.32%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : WHITBY
PLANT : PRINGLE CREEK WPCP NO 1
WORKS NUMBER : 120000747
WATERCOURSE : PRINGLE CREEK

REGION : CENTRAL
DISTRICT : DURHAM, REG. MUN.
OP AUTHORITY : MUNICIPAL
MINOR BASIN : ONTARIO
MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 5.683
POPULATION SERVED : 10,925
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL-CONTINUOUS
:

	PLANT BYPASS			SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN						
FEB						
MAR						
APR						
MAY						
JUN				0.70	23.0	1
JUL						
AUG						
SEP						
OCT						
NOV						
DEC						
TOTAL	0.00	0.0	0	0.70	23.0	1
OBSERVATIONS	0	0.0	0	1	1.0	1
PERCENTAGE OF PLANT EFFLUENT	0.00%			0.07%		

SOUTHEAST REGION

1989 BYPASS OCCURRENCES

MUNICIPALITY : ARNPRIOR
PLANT : ARNPRIOR WPCP
WORKS NUMBER : 120000621
WATERCOURSE : MADAWASKA RIVER

REGION : SOUTHEAST
DISTRICT : RENFREW
OP AUTHORITY : MUNICIPAL
MINOR BASIN : OTTAWA RIVER
MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 6.819
POPULATION SERVED : 5,800
TREATMENT : PRIMARY
: PHOSPHORUS REMOVAL-CONTINUOUS
:

	PLANT BYPASS			SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN						
FEB						
MAR	0.60	11.0	2	0.00	0.0	0
APR						
MAY	0.23	2.0	2			
JUN	0.50	3.5	3			
JUL	0.64	4.3	4			
AUG	0.10	0.8	2			
SEP	0.68	4.0	2			
OCT	0.46	3.5	2			
NOV	0.16	1.5	1			
DEC						
TOTAL	3.38	30.6	18	0.00	0.0	0
OBSERVATIONS	8	8.0	8	1	1.0	1
PERCENTAGE OF PLANT EFFLUENT	0.17%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : BARRY'S BAY
PLANT : BARRY'S BAY WPCP
WORKS NUMBER : 110001854
WATERCOURSE : KAMANISKEG LAKE

REGION : SOUTHEAST
DISTRICT : RENFREW
OP AUTHORITY : MINISTRY OF THE ENVIRONMENT
MINOR BASIN : OTTAWA RIVER
MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 1.241
POPULATION SERVED : 1,413
TREATMENT : EXTENDED AERATION
: PHOSPHORUS REMOVAL-CONTINUOUS
:

	PLANT BYPASS			SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN						
FEB						
MAR						
APR	0.00	0.0	31	0.00	0.0	31
MAY	0.00	0.0	31	0.00	0.0	31
JUN	0.00	0.0	30	0.00	0.0	30
JUL	0.00	0.0	30	0.00	0.0	31
AUG						
SEP						
OCT						
NOV						
DEC						
TOTAL	0.00	0.0	122	0.00	0.0	123
OBSERVATIONS	4	4.0	4	4	4.0	4
PERCENTAGE OF PLANT EFFLUENT	0.00%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : BELLEVILLE
PLANT : BELLEVILLE WPCP (163500 M3/D.P
WORKS NUMBER : 110000016
WATERCOURSE : BAY OF QUINTE

REGION : SOUTHEAST
DISTRICT : HASTINGS
OP AUTHORITY : MINISTRY OF THE ENVIRONMENT
MINOR BASIN : ONTARIO
MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 54.552
POPULATION SERVED : 35,351
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL-CONTINUOUS
:

	PLANT BYPASS			SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN				118.90	632.0	31
FEB	8.00		1	14.45		28
MAR	0.00	0.0	0	30.02	112.0	31
APR	0.00	0.0	0	135.40	356.0	17
MAY	0.00	0.0	0	27.30	147.0	31
JUN	0.00	0.0	30	34.09	107.0	30
JUL	0.00	0.0	31	0.00	0.0	31
AUG	0.00	0.0	31	0.00	0.0	31
SEP	0.00	0.0	30	0.00	0.0	30
OCT	0.00	0.0	31	69.23	74.0	31
NOV	64.00	0.0	30	373.56	385.0	30
DEC						
TOTAL	72.00	0.0	184	802.95	1,813.0	321
OBSERVATIONS	10	9.0	10	11	10.0	11
PERCENTAGE OF PLANT EFFLUENT	0.86%			9.55%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : BROCKVILLE
PLANT : BROCKVILLE WPCP
WORKS NUMBER : 120000122
WATERCOURSE : ST.LAWRENCE RIVER

REGION : SOUTHEAST
DISTRICT : LEEDS AND GRENVILLE
OP AUTHORITY : MUNICIPAL
MINOR BASIN : ST. LAWRENCE
MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 21.820
POPULATION SERVED : 20,607
TREATMENT : PRIMARY
: PHOSPHORUS REMOVAL-CONTINUOUS
:

	PLANT BYPASS			SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN	0.00		0			
FEB	0.00		0			
MAR	0.00		0			
APR	0.00		0			
MAY	0.00		0			
JUN	0.00		0			
JUL	6.81	2.0	1			
AUG	0.00		1			
SEP	0.00		0			
OCT	0.00		0			
NOV	0.00		0			
DEC	0.00		1			
TOTAL	6.81	2.0	3	0.00	0.0	0
OBSERVATIONS	12	1.0	12	0	0.0	0
PERCENTAGE OF PLANT EFFLUENT	0.10%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : CARLETON PLACE
PLANT : CARLETON PLACE WPCP
WORKS NUMBER : 110000971
WATERCOURSE : MISSISSIPPI RIVER

REGION : SOUTHEAST
DISTRICT : LANARK
OP AUTHORITY : MINISTRY OF THE ENVIRONMENT
MINOR BASIN : OTTAWA RIVER
MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 5.455
POPULATION SERVED : 6,600
TREATMENT : HIGH RATE
: PHOSPHORUS REMOVAL-CONTINUOUS
:

	PLANT BYPASS			SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN	1.38	1.0	1			
FEB						
MAR	5.54	372.0	10			
APR	40.07	352.0	20	0.00	0.0	0
MAY	29.30	292.0	19	0.00	0.0	0
JUN	0.00		0	0.00		0
JUL	0.00	0.0	0	0.00	0.0	0
AUG						
SEP	0.00		0	0.00		0
OCT						
NOV	0.00	26.0	12			
DEC						
TOTAL	76.29	1,043.0	62	0.00	0.0	0
OBSERVATIONS	8	6.0	8	5	3.0	5
PERCENTAGE OF PLANT EFFLUENT	5.22%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : COBDEN
PLANT : COBDEN WPCP
WORKS NUMBER : 120000596
WATERCOURSE : MUSKRAT RIVER

REGION : SOUTHEAST
DISTRICT : RENFREW
OP AUTHORITY : MUNICIPAL
MINOR BASIN : OTTAWA RIVER
MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 0.682
POPULATION SERVED : 1,035
TREATMENT : EXTENDED AERATION
: PHOSPHORUS REMOVAL-CONTINUOUS
:

	PLANT BYPASS			SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN	0.00		0			
FEB	0.00	0.0	0			
MAR	1.03	32.0	4			
APR	0.00	0.0	0			
MAY	0.00	0.0	0			
JUN	0.00	0.0	0			
JUL	0.60	6.0	1			
AUG	0.00	0.0	0			
SEP	0.33	4.0	1			
OCT	0.05	1.0	1			
NOV	0.00		0			
DEC	0.00		0			
TOTAL	2.01	43.0	7	0.00	0.0	0
OBSERVATIONS	12	8.0	12	0	0.0	0
PERCENTAGE OF PLANT EFFLUENT	0.81%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : DEEP RIVER
PLANT : DEEP RIVER WPCP
WORKS NUMBER : 120000612
WATERCOURSE : OTTAWA RIVER

REGION : SOUTHEAST
DISTRICT : RENFREW
OP AUTHORITY : MUNICIPAL
MINOR BASIN : OTTAWA RIVER
MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 2.182
POPULATION SERVED : 4,230
TREATMENT : PRIMARY
:
:

	PLANT BYPASS			SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN	0.00	0.0	0	0.00	0.0	0
FEB	1.81		1			
MAR						
APR	0.00	0.0	0	0.00	0.0	0
MAY	0.00	0.0	0	0.00	0.0	0
JUN	0.00	0.0	0	0.00	0.0	0
JUL	0.00	0.0	0	0.00	0.0	0
AUG	0.00	0.0	0	0.00	0.0	0
SEP	0.68	6.0	1	0.00	0.0	0
OCT	0.00		0	0.00		0
NOV	0.00		0	0.00		0
DEC	0.00	0.0	0	0.00	0.0	0
TOTAL	2.49	6.0	2	0.00	0.0	0
OBSERVATIONS	11	8.0	11	10	8.0	10
PERCENTAGE OF PLANT EFFLUENT	0.40%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : DELORO
PLANT : DELORO WPCP
WORKS NUMBER : 120000970
WATERCOURSE : MOIRA RIVER

REGION : SOUTHEAST
DISTRICT : HASTINGS
OP AUTHORITY : MINISTRY OF THE ENVIRONMENT
MINOR BASIN : ONTARIO
MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 1.746
POPULATION SERVED : 157
TREATMENT : COMMUNAL SEPTIC TANK
:
:

	PLANT BYPASS			SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN						
FEB				2.27	9.5	2
MAR				4.05	16.9	3
APR				58.88	245.3	13
MAY				59.19	246.6	9
JUN				29.85	124.4	7
JUL				0.00	0.0	0
AUG						
SEP				0.00	0.0	0
OCT						
NOV				40.84	170.1	11
DEC						
TOTAL	0.00	0.0	0	195.08	812.8	45
OBSERVATIONS	0	0.0	0	8	8.0	8
PERCENTAGE OF PLANT EFFLUENT	0.40%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : DESERONTO
PLANT : DESERONTO WPCP
WORKS NUMBER : 110000980
WATERCOURSE : BAY OF QUINTE

REGION : SOUTHEAST
DISTRICT : HASTINGS
OP AUTHORITY : MINISTRY OF THE ENVIRONMENT
MINOR BASIN : ONTARIO
MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 1.364
POPULATION SERVED : 1,732
TREATMENT : EXTENDED AERATION
: PHOSPHORUS REMOVAL-CONTINUOUS
:

	PLANT BYPASS			SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN						
FEB						
MAR						
APR	0.00	0.0	0	0.00	0.0	0
MAY	0.00	0.0	0	0.00	0.0	0
JUN						
JUL						
AUG						
SEP						
OCT						
NOV	4.32	48.0	30			
DEC						
TOTAL	4.32	48.0	30	0.00	0.0	0
OBSERVATIONS	3	3.0	3	2	2.0	2
PERCENTAGE OF PLANT EFFLUENT	1.07%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : EGANVILLE
PLANT : EGANVILLE WPCP
WORKS NUMBER : 110000141
WATERCOURSE : BONNECHERE RIVER

REGION : SOUTHEAST
DISTRICT : RENFREW
OP AUTHORITY : MINISTRY OF THE ENVIRONMENT
MINOR BASIN : OTTAWA RIVER
MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 0.764
POPULATION SERVED : 1,219
TREATMENT : EXTENDED AERATION

	PLANT BYPASS			SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN						
FEB						
MAR	0.00	0.0	0	0.00	0.0	0
APR	0.00		1	0.00		1
MAY	0.00	0.0	0	0.00	0.0	0
JUN	0.00	0.0	0	0.00	0.0	0
JUL	0.00	0.0	0	0.00	0.0	0
AUG	0.00	0.0	0	0.00	0.0	0
SEP						
OCT						
NOV						
DEC						
TOTAL	0.00	0.0	1	0.00	0.0	1
OBSERVATIONS	6	5.0	6	6	5.0	6
PERCENTAGE OF PLANT EFFLUENT	0.00%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : ERNESTOWN
PLANT : ODESSA WPCP
WORKS NUMBER : 110002041
WATERCOURSE : MILLHAVEN CREEK

REGION : SOUTHEAST
DISTRICT : LENNOX & ADDINGTON
OP AUTHORITY : MINISTRY OF THE ENVIRONMENT
MINOR BASIN : ONTARIO
MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 0.909
POPULATION SERVED : 973
TREATMENT : EXTENDED AERATION
: PHOSPHORUS REMOVAL-CONTINUOUS
:

	PLANT BYPASS			SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN						
FEB						
MAR						
APR	0.00	3.0	0	0.00	0.0	0
MAY						
JUN	0.00	0.0	0	0.00	0.0	0
JUL	0.00	0.0	0	0.00	0.0	0
AUG						
SEP						
OCT						
NOV						
DEC						
TOTAL	0.00	3.0	0	0.00	0.0	0
OBSERVATIONS	3	3.0	3	3	3.0	3
PERCENTAGE OF PLANT EFFLUENT	0.00%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : GLOUCESTER
PLANT : GREEN CREEK WPCP
WORKS NUMBER : 120000729
WATERCOURSE : OTTAWA RIVER

REGION : SOUTHEAST
DISTRICT : OTTAWA-CARLETON, REG. MUN.
OP AUTHORITY : MUNICIPAL
MINOR BASIN : OTTAWA RIVER
MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 363.680
POPULATION SERVED : 450,000
TREATMENT : PRIMARY
: PHOSPHORUS REMOVAL-CONTINUOUS
:

	PLANT BYPASS			SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN	0.00	0.0	0	0.00	0.0	0
FEB	0.00	0.0	0	0.00	0.0	0
MAR	0.00	0.0	0	0.00	0.0	0
APR	0.00	0.0	0	0.00	0.0	0
MAY		2.3				
JUN						
JUL						
AUG						
SEP						
OCT						
NOV	0.00	161.0	13	0.00	0.0	0
DEC	0.00	0.0	0	0.00	0.0	0
TOTAL	0.00	163.3	13	0.00	0.0	0
OBSERVATIONS	6	7.0	6	6	6.0	6
PERCENTAGE OF PLANT EFFLUENT	0.00%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : HAGARTY & RICHARDS
PLANT : KILLALOE STN.WPCP
WORKS NUMBER : 110001532
WATERCOURSE : BRUDENELL CREEK

REGION : SOUTHEAST
DISTRICT : RENFREW
OP AUTHORITY : MINISTRY OF THE ENVIRONMENT
MINOR BASIN : OTTAWA RIVER
MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 0.518
POPULATION SERVED : 670
TREATMENT : EXTENDED AERATION
: PHOSPHORUS REMOVAL-CONTINUOUS
:

	PLANT BYPASS			SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN						
FEB						
MAR						
APR	0.00	0.0	31	0.00		31
MAY	0.00	0.0	31	0.00	0.0	31
JUN	0.00	0.0	30	0.00	0.0	30
JUL	0.00	0.0	31	0.00	0.0	31
AUG						
SEP						
OCT						
NOV						
DEC	0.00		31			
TOTAL	0.00	0.0	154	0.00	0.0	123
OBSERVATIONS	5	4.0	5	4	3.0	4
PERCENTAGE OF PLANT EFFLUENT	0.00%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : HAWKESBURY
PLANT : HAWKESBURY WPCP
WORKS NUMBER : 110002283
WATERCOURSE : OTTAWA RIVER

REGION : SOUTHEAST
DISTRICT : PRESCOTT AND RUSSELL
OP AUTHORITY : MINISTRY OF THE ENVIRONMENT
MINOR BASIN : OTTAWA RIVER
MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 12.274
POPULATION SERVED : 9,680
TREATMENT : MODIFIED ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL-CONTINUOUS
:

	PLANT BYPASS			SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN	6.21	1.2	2			
FEB	0.51	0.1	1			
MAR	125.92	24.3	5			
APR	14.51	2.8	2			
MAY	2.07	0.4	2			
JUN	24.35	4.7	8			
JUL	14.51	2.8	4			
AUG	31.61	6.1	4			
SEP	12.95	2.5	2			
OCT	35.75	6.9	5			
NOV	67.36	13.0	8			
DEC	6.21	1.2	1			
TOTAL	342.01	66.0	44	0.00	0.0	0
OBSERVATIONS	12	12.0	12	0	0.0	0
PERCENTAGE OF PLANT EFFLUENT	11.84%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : KINGSTON
PLANT : KINGSTON WPCP
WORKS NUMBER : 120001050
WATERCOURSE : ST.LAWRENCE RIVER

REGION : SOUTHEAST
DISTRICT : FRONTENAC
OP AUTHORITY : MUNICIPAL
MINOR BASIN : ST. LAWRENCE
MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 61.371
POPULATION SERVED : 67,000
TREATMENT : PRIMARY
: PHOSPHORUS REMOVAL-CONTINUOUS
:

	PLANT BYPASS			SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN	18.50	7.0	1			
FEB	0.00	0.0	0			
MAR	0.00	0.0	0			
APR	0.00	0.0	0			
MAY	0.00	0.0	0			
JUN	0.00	0.0	0			
JUL	0.00	0.0	0			
AUG	0.00	0.0	0			
SEP	0.00	0.0	0			
OCT	0.00	0.0	0			
NOV	0.00	0.0	0			
DEC	0.00	0.0	0			
TOTAL	18.50	7.0	1	0.00	0.0	0
OBSERVATIONS	12	12.0	12	0	0.0	0
PERCENTAGE OF PLANT EFFLUENT	0.09%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : L'ORIGNAL
PLANT : L'ORIGNAL WPCP
WORKS NUMBER : 110001701
WATERCOURSE : OTTAWA RIVER

REGION : SOUTHEAST
DISTRICT : PRESCOTT AND RUSSELL
OP AUTHORITY : MINISTRY OF THE ENVIRONMENT
MINOR BASIN : OTTAWA RIVER
MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 0.955
POPULATION SERVED : 1,523
TREATMENT : EXTENDED AERATION
:
:

	PLANT BYPASS			SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN						
FEB						
MAR	1.30	30.0	1			
APR						
MAY						
JUN						
JUL						
AUG						
SEP						
OCT						
NOV	7.77	144.5	7			
DEC						
TOTAL	9.07	174.5	8	0.00	0.0	0
OBSERVATIONS	2	2.0	2	0	0.0	0
PERCENTAGE OF PLANT EFFLUENT	3.27%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : NAPANEE
PLANT : NAPANEE WPCP
WORKS NUMBER : 120000186
WATERCOURSE : NAPANEE RIVER

REGION : SOUTHEAST
DISTRICT : LENNOX & ADDINGTON
OP AUTHORITY : MUNICIPAL
MINOR BASIN : ONTARIO
MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 9.092
POPULATION SERVED : 7,500
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL-CONTINUOUS
:

	PLANT BYPASS			SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN						
FEB	0.00	0.0	0	0.00	0.0	0
MAR				1.09	12.0	1
APR	0.00	0.0	0	5.00	41.5	3
MAY	0.00	0.0	0	0.00	0.0	0
JUN						
JUL						
AUG	0.00	0.0	0	0.00	0.0	0
SEP	0.00	0.0	0	0.00	0.0	0
OCT	0.00	0.0	0	0.00	0.0	0
NOV	47.30		9	0.00	0.0	0
DEC	0.00	0.0	0	0.00	0.0	0
TOTAL	47.30	0.0	9	6.09	53.5	4
OBSERVATIONS	8	7.0	8	9	9.0	9
PERCENTAGE OF PLANT EFFLUENT	2.13%			0.27%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : NEPEAN
PLANT : WATTS CREEK WPCP
WORKS NUMBER : 120000701
WATERCOURSE : WATTS CREEK

REGION : SOUTHEAST
DISTRICT : OTTAWA-CARLETON, REG. MUN.
OP AUTHORITY : MUNICIPAL
MINOR BASIN : OTTAWA RIVER
MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 29.549
POPULATION SERVED : 52,500
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL-CONTINUOUS
:

	PLANT BYPASS			SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN	0.00	0.0	0	0.00	0.0	0
FEB	0.00	0.0	0	0.00	0.0	0
MAR	0.00	0.0	0	121.80	140.6	13
APR	0.00	0.0	0	53.60	177.5	26
MAY	0.00	0.0	0	50.40	332.1	31
JUN				21.20		1
JUL				10.70		1
AUG				1.90		1
SEP				1.00		1
OCT	0.00	0.0	0	2.60	7.7	21
NOV	0.00	0.0	0	41.80	182.5	26
DEC	0.00	0.0	0	5.30	6.7	23
TOTAL	0.00	0.0	0	310.30	847.1	144
OBSERVATIONS	3	8.0	8	12	8.0	12
PERCENTAGE OF PLANT EFFLUENT	0.00%			3.06%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : OSNABRUCK
PLANT : INGLESIDE WPCP
WORKS NUMBER : 120000140
WATERCOURSE : ST. LAWRENCE RIVER

REGION : SOUTHEAST
DISTRICT : STORMONT, DUNDAS AND GLENGARR
OP AUTHORITY : MUNICIPAL
MINOR BASIN : ST. LAWRENCE
MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 1.573
POPULATION SERVED : 1,500
TREATMENT : PRIMARY
:
:

	PLANT BYPASS			SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN						
FEB						
MAR						
APR						
MAY						
JUN	0.36	1.0	1			
JUL						
AUG						
SEP						
OCT						
NOV						
DEC						
TOTAL	0.36	1.0	1	0.00	0.0	0
OBSERVATIONS	1	1.0	1	0	0.0	0
PERCENTAGE OF PLANT EFFLUENT	0.09%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : PETAWAWA
PLANT : PETAWAWA WPCP
WORKS NUMBER : 120000587
WATERCOURSE : OTTAWA RIVER

REGION : SOUTHEAST
DISTRICT : RENFREW
OP AUTHORITY : MINISTRY OF THE ENVIRONMENT
MINOR BASIN : OTTAWA RIVER
MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 4.546
POPULATION SERVED : 9,800
TREATMENT : PRIMARY
: PHOSPHORUS REMOVAL-CONTINUOUS
:

	PLANT BYPASS			SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN						
FEB						
MAR						
APR	0.00	0.0	30	0.00	0.0	0
MAY						
JUN	0.00	0.0	31	0.00	0.0	0
JUL	0.00	0.0	31	0.00	0.0	0
AUG						
SEP						
OCT	0.00		0	0.00		0
NOV						
DEC						
TOTAL	0.00	0.0	92	0.00	0.0	0
OBSERVATIONS	4	3.0	4	4	3.0	4
PERCENTAGE OF PLANT EFFLUENT	0.00%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : PICTON
PLANT : PICTON WPCP
WORKS NUMBER : 120000667
WATERCOURSE : PICTON BAY

REGION : SOUTHEAST
DISTRICT : PRINCE EDWARD
OP AUTHORITY : MUNICIPAL
MINOR BASIN : ONTARIO
MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 4.546
POPULATION SERVED : 4,500
TREATMENT : CONTACT STABILIZATION
: PHOSPHORUS REMOVAL-CONTINUOUS
:

	PLANT BYPASS			SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN	0.00	0.0	0	0.00	0.0	0
FEB	0.00	0.0	0	0.00	0.0	0
MAR	0.00	0.0	0	6.31	26.7	4
APR	0.00	0.0	0	1.72	7.3	1
MAY	0.00	0.0	0	0.00	0.0	0
JUN	0.00	0.0	0	0.00	0.0	0
JUL	0.00	0.0	0	0.00	0.0	0
AUG	0.00	0.0	0	0.00	0.0	0
SEP	0.00	0.0	0	0.00	0.0	0
OCT	0.00	0.0	0	0.00	0.0	0
NOV	0.00	0.0	0	0.00	0.0	0
DEC	0.00	0.0	0	0.00	0.0	0
TOTAL	0.00	0.0	0	8.03	34.0	5
OBSERVATIONS	12	12.0	12	12	12.0	12
PERCENTAGE OF PLANT EFFLUENT	0.00%			0.79%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : PRESCOTT
PLANT : EDWARDSBURGH WPCP
WORKS NUMBER : 110001122
WATERCOURSE : ST. LAWRENCE RIVER

REGION : SOUTHEAST
DISTRICT : LEEDS AND GRENVILLE
OP AUTHORITY : MINISTRY OF THE ENVIRONMENT
MINOR BASIN : ST. LAWRENCE
MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 5.683
POPULATION SERVED : 4,595
TREATMENT : PRIMARY
: PHOSPHORUS REMOVAL-CONTINUOUS
:

	PLANT BYPASS			SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN	0.00	24.5	0	0.00	0.0	0
FEB						
MAR	0.00	0.6	0	0.00	0.0	0
APR	0.00	0.0	0	0.00	0.0	0
MAY	0.00	5.5	0	0.00	0.0	0
JUN						
JUL	0.00		0	0.00		0
AUG						
SEP	0.00	0.0	0	0.00	0.0	0
OCT						
NOV						
DEC						
TOTAL	0.00	30.6	0	0.00	0.0	0
OBSERVATIONS	6	5.0	6	6	5.0	6
PERCENTAGE OF PLANT EFFLUENT	0.00%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : SIDNEY
PLANT : BATAWA WPCP
WORKS NUMBER : 110000668
WATERCOURSE : TRENT RIVER

REGION : SOUTHEAST
DISTRICT : HASTINGS
OP AUTHORITY : MINISTRY OF THE ENVIRONMENT
MINOR BASIN : ONTARIO
MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 0.568
POPULATION SERVED : 300
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL-CONTINUOUS
:

	PLANT BYPASS			SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN	0.00	0.0	0	0.00	0.0	0
FEB						
MAR						
APR	0.00	0.0	0	1.47	0.0	2
MAY				0.37		1
JUN						
JUL						
AUG						
SEP				0.80		1
OCT				0.23		1
NOV				10.33		9
DEC	0.00		0		0.0	
TOTAL	0.00	0.0	0	13.20	0.0	14
OBSERVATIONS	3	2.0	3	6	3.0	6
PERCENTAGE OF PLANT EFFLUENT	0.00%			8.98%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : SMITHS FALLS
PLANT : SMITHS FALLS WPCP
WORKS NUMBER : 120000890
WATERCOURSE : RIDEAU RIVER

REGION : SOUTHEAST
DISTRICT : LANARK
OP AUTHORITY : MUNICIPAL
MINOR BASIN : OTTAWA RIVER
MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 11.365
POPULATION SERVED : 11,000
TREATMENT : PRIMARY
: PHOSPHORUS REMOVAL-CONTINUOUS
:

	PLANT BYPASS			SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN	0.00	0.0	2	0.00	0.0	2
FEB	0.00	0.0	0			
MAR	0.00	0.0	0			
APR	0.00	0.0	0			
MAY	0.00	0.0	0	0.00	0.0	0
JUN		5.5		0.00	0.0	0
JUL	0.00	0.0	0	0.00	0.0	0
AUG	0.00	0.0	0	0.00	0.0	0
SEP						
OCT						
NOV	0.00	0.0	0	0.00	0.0	0
DEC	0.00	0.0	0	0.00	0.0	0
TOTAL	0.00	5.5	2	0.00	0.0	2
OBSERVATIONS	9	10.0	9	7	7.0	7
PERCENTAGE OF PLANT EFFLUENT	0.00%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : TRENTON
PLANT : TRENTON WPCP
WORKS NUMBER : 110000775
WATERCOURSE : BAY OF QUINTE

REGION : SOUTHEAST
DISTRICT : HASTINGS
OP AUTHORITY : MINISTRY OF THE ENVIRONMENT
MINOR BASIN : ONTARIO
MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 15.911
POPULATION SERVED : 15,346
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL-CONTINUOUS
:

	PLANT BYPASS			SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN						
FEB						
MAR						
APR	0.00	0.0	0	0.00	0.0	0
MAY						
JUN						
JUL						
AUG						
SEP						
OCT	0.00		0	0.00		0
NOV	21.98		3			
DEC	0.00		0	0.00		0
TOTAL	21.98	0.0	3	0.00	0.0	0
OBSERVATIONS	4	1.0	4	3	1.0	3
PERCENTAGE OF PLANT EFFLUENT	0.59%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : WELLINGTON
PLANT : WELLINGTON WPCP
WORKS NUMBER : 120003165
WATERCOURSE : LAKE ONTARIO

REGION : SOUTHEAST
DISTRICT : PRINCE EDWARD
OP AUTHORITY : MUNICIPAL
MINOR BASIN : ONTARIO
MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 1.500
POPULATION SERVED : 1,077
TREATMENT : EXTENDED AERATION
: PHOSPHORUS REMOVAL-CONTINUOUS
:

	PLANT BYPASS			SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN	0.00		0	0.00		0
FEB	0.00		0	0.00		0
MAR	0.00		0	0.00		0
APR	0.00		0	0.00		0
MAY	0.00		0	0.00		0
JUN						
JUL						
AUG	0.16	10.2	2	0.15	8.0	1
SEP	0.03	2.7	1			
OCT						
NOV	0.23	8.0	1			
DEC						
TOTAL	0.43	20.9	4	0.15	8.0	1
OBSERVATIONS	8	3.0	8	6	1.0	6
PERCENTAGE OF PLANT EFFLUENT	0.22%			0.08%		

NORTHEAST REGION

1989 BYPASS OCCURRENCES

MUNICIPALITY : BLACK RIVER MATHESON
PLANT : MATHESON WPCP
WORKS NUMBER : 110000025
WATERCOURSE : BLACK RIVER

REGION : NORTHEAST
DISTRICT : COCHRANE
OP AUTHORITY : MINISTRY OF THE ENVIRONMENT
MINOR BASIN : JAMES BAY
MAJOR BASIN : ARCTIC WATERSHED

DESIGN CAPACITY : 1.046
POPULATION SERVED : 920
TREATMENT : EXTENDED AERATION
:
:

	PLANT BYPASS			SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN	0.00		0	0.00		0
FEB						
MAR	0.00		31			
APR	0.44	11.0	30			
MAY	0.00		31			
JUN	0.00		30			
JUL	0.00		31			
AUG	0.00		31			
SEP	0.00		30			
OCT	0.00		31			
NOV	0.00		30			
DEC	0.00		31			
TOTAL	0.44	11.0	306	0.00	0.0	0
OBSERVATIONS	11	1.0	11	1	0.0	1
PERCENTAGE OF PLANT EFFLUENT	0.22%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : BLIND RIVER
PLANT : BLIND RIVER WPCP
WORKS NUMBER : 110002416
WATERCOURSE : LAKE HURON

REGION : NORTHEAST
DISTRICT : ALGOMA
OP AUTHORITY : MINISTRY OF THE ENVIRONMENT
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 3.500
POPULATION SERVED : 3,200
TREATMENT : EXTENDED AERATION

	PLANT BYPASS			SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN						
FEB						
MAR	5.02	23.0	2			
APR	0.00		0			
MAY						
JUN						
JUL						
AUG						
SEP	0.00		0			
OCT	0.00		0	0.00		0
NOV	0.00		0	0.00		0
DEC						
TOTAL	5.02	23.0	2	0.00	0.0	0
OBSERVATIONS	5	1.0	5	2	0.0	2
PERCENTAGE OF PLANT EFFLUENT	0.82%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : HORNEPAYNE
PLANT : HORNEPAYNE WPCP
WORKS NUMBER : 110001952
WATERCOURSE : JACKFISH RIVER

REGION : NORTHEAST
DISTRICT : ALGOMA
OP AUTHORITY : MINISTRY OF THE ENVIRONMENT
MINOR BASIN : JAMES BAY
MAJOR BASIN : ARCTIC WATERSHED

DESIGN CAPACITY : 1.364
POPULATION SERVED : 1,675
TREATMENT : EXTENDED AERATION
:
:

	PLANT BYPASS			SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN						
FEB						
MAR						
APR	0.27	3.3	1			
MAY						
JUN						
JUL						
AUG						
SEP						
OCT						
NOV						
DEC						
TOTAL	0.27	3.3	1	0.00	0.0	0
OBSERVATIONS	1	1.0	1	0	0.0	0
PERCENTAGE OF PLANT EFFLUENT	0.08%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : IROQUOIS FALLS
PLANT : IROQUOIS FALLS WPCP
WORKS NUMBER : 110002121
WATERCOURSE : ABITIBI RIVER

REGION : NORTHEAST
DISTRICT : COCHRANE
OP AUTHORITY : MINISTRY OF THE ENVIRONMENT
MINOR BASIN : JAMES BAY
MAJOR BASIN : ARCTIC WATERSHED

DESIGN CAPACITY : 4.091
POPULATION SERVED : 5,575
TREATMENT : CONTACT STABILIZATION
:
:

	PLANT BYPASS			SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN						
FEB						
MAR						
APR						
MAY						
JUN	6.82		1			
JUL						
AUG	6.36		1			
SEP						
OCT						
NOV						
DEC						
TOTAL	13.18	0.0	2	0.00	0.0	0
OBSERVATIONS	2	0.0	2	0	0.0	0
PERCENTAGE OF PLANT EFFLUENT	1.09%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : KAPUSKASING
PLANT : KAPUSKASING WPCP
WORKS NUMBER : 110003004
WATERCOURSE : KAPUSKASING RIVER

REGION : NORTHEAST
DISTRICT : COCHRANE
OP AUTHORITY : MINISTRY OF THE ENVIRONMENT
MINOR BASIN : JAMES BAY
MAJOR BASIN : ARCTIC WATERSHED

DESIGN CAPACITY : 9.092
POPULATION SERVED : 12,500
TREATMENT : EXTENDED AERATION
:
:

	PLANT BYPASS			SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN	0.00		31			
FEB	0.00		28			
MAR	0.00		31			
APR	0.00		25			
MAY						
JUN	0.00		28			
JUL	0.00		31			
AUG	0.00		18			
SEP	0.00		30			
OCT	0.00		20			
NOV	0.00	0.0	26			
DEC	0.00		31			
TOTAL	0.00	0.0	299	0.00	0.0	0
OBSERVATIONS	11	1.0	11	0	0.0	0
PERCENTAGE OF PLANT EFFLUENT	0.00%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : KIRKLAND LAKE
PLANT : KIRKLAND LAKE WPCP
WORKS NUMBER : 120000015
WATERCOURSE : MURDOCK CREEK

REGION : NORTHEAST
DISTRICT : TIMISKAMING
OP AUTHORITY : MINISTRY OF THE ENVIRONMENT
MINOR BASIN : OTTAWA RIVER
MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 13.638
POPULATION SERVED : 12,500
TREATMENT : CONTACT STABILIZATION
: PHOSPHORUS REMOVAL-CONTINUOUS
:

	PLANT BYPASS			SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN						
FEB						
MAR						
APR	33.41	117.7	16			
MAY	2.64	9.3	8			
JUN	2.69	9.5	5			
JUL	2.61	9.2	1			
AUG	2.33	8.2	1			
SEP						
OCT						
NOV						
DEC						
TOTAL	43.69	153.9	31	0.00	0.0	0
OBSERVATIONS	5	5.0	5	0	0.0	0
PERCENTAGE OF PLANT EFFLUENT	1.04%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : MOOSONEE D.A.B.
PLANT : MOOSONEE WPCP (NORTH)
WORKS NUMBER : 120000319
WATERCOURSE : MOOSE RIVER

REGION : NORTHEAST
DISTRICT : COCHRANE
OP AUTHORITY : MINISTRY OF THE ENVIRONMENT
MINOR BASIN : JAMES BAY
MAJOR BASIN : ARCTIC WATERSHED

DESIGN CAPACITY : 0.250
POPULATION SERVED : 300
TREATMENT : EXTENDED AERATION
:
:

	PLANT BYPASS			SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN	0.00		29			
FEB	0.00		25			
MAR	0.00		8			
APR	0.00		12			
MAY	0.00		31			
JUN	0.00		26			
JUL	0.00		31			
AUG	0.00	0.0	28			
SEP	0.00		29			
OCT	0.00		22			
NOV	0.00		30			
DEC	0.00		31			
TOTAL	0.00	0.0	302	0.00	0.0	0
OBSERVATIONS	12	1.0	12	0	0.0	0
PERCENTAGE OF PLANT EFFLUENT	0.00%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : MOOSONEE D.A.B.
PLANT : MOOSONEE WPCP (OLD TOWNSITE)
WORKS NUMBER : 110001060
WATERCOURSE : STORE CK TO MOOSE RIVER

REGION : NORTHEAST
DISTRICT : COCHRANE
OP AUTHORITY : MINISTRY OF THE ENVIRONMENT
MINOR BASIN : JAMES BAY
MAJOR BASIN : ARCTIC WATERSHED

DESIGN CAPACITY : 0.509
POPULATION SERVED : 1,500
TREATMENT : CONTACT STABILIZATION
:
:

	PLANT BYPASS			SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN	0.00		30			
FEB	0.47	35.0	1			
MAR	0.06	4.0	1			
APR	0.00		13			
MAY	0.12	3.5	1			
JUN	0.00		30			
JUL	0.00		31			
AUG	0.00		26			
SEP	0.00		30			
OCT	0.00		22			
NOV	0.00		30			
DEC	0.00		31			
TOTAL	0.65	42.5	246	0.00	0.0	0
OBSERVATIONS	12	3.0	12	0	0.0	0
PERCENTAGE OF PLANT EFFLUENT	0.26%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : NICKEL CENTRE
PLANT : CONISTON WPCP
WORKS NUMBER : 110000123
WATERCOURSE : CONISTON CREEK

REGION : NORTHEAST
DISTRICT : SUDBURY, REG. MUN.
OP AUTHORITY : MUNICIPAL
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 3.000
POPULATION SERVED : 2,790
TREATMENT : OXIDATION DITCH
: CONVENTIONAL ACTIVATED SLUDGE
:

	PLANT BYPASS			SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN						
FEB						
MAR	4.80	28.5	0			
APR	1.73	11.3	0			
MAY						
JUN	4.90		2			
JUL						
AUG						
SEP						
OCT						
NOV						
DEC						
TOTAL	11.44	39.8	2	0.00	0.0	0
OBSERVATIONS	3	2.0	3	0	0.0	0
PERCENTAGE OF PLANT EFFLUENT	2.41%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : NORTH BAY
PLANT : NORTH BAY WPCP
WORKS NUMBER : 110000533
WATERCOURSE : LAKE NIPISSING

REGION : NORTHEAST
DISTRICT : NIPPISSING
OP AUTHORITY : MINISTRY OF THE ENVIRONMENT
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 36.368
POPULATION SERVED : 48,000
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL-CONTINUOUS
:

	PLANT BYPASS			SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN	0.00		31	0.00		31
FEB	0.00	0.0	27	0.00	0.0	27
MAR	0.00		31	0.00		31
APR	0.00		30	0.00		30
MAY	0.00		31	0.00		31
JUN	0.00		30	0.00		30
JUL	0.00	0.0	31	0.00		30
AUG	0.00		31	0.00		31
SEP	0.00		30	0.00		30
OCT	0.00		31	0.00		31
NOV	0.00		30	0.00		30
DEC	0.00		31	0.00		31
TOTAL	0.00	0.0	364	0.00	0.0	363
OBSERVATIONS	12	2.0	12	12	1.0	12
PERCENTAGE OF PLANT EFFLUENT	0.00%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : PARRY SOUND
PLANT : PARRY SOUND WPCP
WORKS NUMBER : 110000560
WATERCOURSE : MC CURRY LAKE

REGION : NORTHEAST
DISTRICT : PARRY SOUND
OP AUTHORITY : MINISTRY OF THE ENVIRONMENT
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 6.592
POPULATION SERVED : 5,500
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL-CONTINUOUS
:

	PLANT BYPASS			SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN	0.00		30			
FEB	0.00		28			
MAR	0.00		31			
APR	0.00		29			
MAY	0.00		31			
JUN	0.00		0			
JUL	0.00		31			
AUG	0.00	0.0	30			
SEP	0.00		28			
OCT	0.00		31			
NOV	0.00		29			
DEC	0.00		31			
TOTAL	0.00	0.0	329	0.00	0.0	0
OBSERVATIONS	12	1.0	12	0	0.0	0
PERCENTAGE OF PLANT EFFLUENT	0.00%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : RAYSIDE-BALFOUR
PLANT : CHELMSFORD WPCP
WORKS NUMBER : 120001568
WATERCOURSE : WHITSON RIVER

REGION : NORTHEAST
DISTRICT : SUDBURY, REG. MUN.
OP AUTHORITY : MUNICIPAL
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 3.068
POPULATION SERVED : 4,934
TREATMENT : EXTENDED AERATION
: CONTACT STABILIZATION
: PHOSPHORUS REMOVAL-CONTINUOUS

	PLANT BYPASS			SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN						
FEB						
MAR	12.73	48.0	2			
APR						
MAY						
JUN						
JUL						
AUG						
SEP						
OCT						
NOV						
DEC						
TOTAL	12.73	48.0	2	0.00	0.0	0
OBSERVATIONS	1	1.0	1	0	0.0	0
PERCENTAGE OF PLANT EFFLUENT	0.91%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : SAULT STE MARIE
PLANT : WEST END WPCP
WORKS NUMBER : 110002540
WATERCOURSE : ST MARY'S RIVER

REGION : NORTHEAST
DISTRICT : ALGOMA
OP AUTHORITY : MINISTRY OF THE ENVIRONMENT
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 18.184
POPULATION SERVED : 80,000
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL-CONTINUOUS
:

	PLANT BYPASS			SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN	0.00		31			
FEB	0.20		1			
MAR	0.50		1			
APR	0.20		1			
MAY	0.10		1			
JUN	0.00		27			
JUL	2.50	0.1	1		0.0	
AUG	1.70		1			
SEP	1.00		1			
OCT	3.90		1			
NOV						
DEC	0.00		31			
TOTAL	10.10	0.1	97	0.00	0.0	0
OBSERVATIONS	11	1.0	11	0	1.0	0
PERCENTAGE OF PLANT EFFLUENT	0.38%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : SMOOTH ROCK FALLS
PLANT : SMOOTH ROCK FALLS WPCP
WORKS NUMBER : 110002130
WATERCOURSE : MATTAGAMI RIVER

REGION : NORTHEAST
DISTRICT : COCHRANE
OP AUTHORITY : MINISTRY OF THE ENVIRONMENT
MINOR BASIN : JAMES BAY
MAJOR BASIN : ARCTIC WATERSHED

DESIGN CAPACITY : 1.637
POPULATION SERVED : 2,251
TREATMENT : EXTENDED AERATION

	PLANT BYPASS			SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN						
FEB						
MAR						
APR						
MAY						
JUN	0.00		30			
JUL	0.00		1			
AUG						
SEP						
OCT						
NOV						
DEC						
TOTAL	0.00	0.0	31	0.00	0.0	0
OBSERVATIONS	2	0.0	2	0	0.0	0
PERCENTAGE OF PLANT EFFLUENT	0.00%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : STURGEON FALLS
PLANT : STURGEON FALLS WPCP
WORKS NUMBER : 110001435
WATERCOURSE : STURGEON RIVER

REGION : NORTHEAST
DISTRICT : NIPPISSING
OP AUTHORITY : MINISTRY OF THE ENVIRONMENT
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 4.546
POPULATION SERVED : 6,040
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL-CONTINUOUS
:

	PLANT BYPASS			SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN	0.00		31			
FEB	0.00		28			
MAR						
APR	0.00		30			
MAY						
JUN	0.00		30			
JUL						
AUG	0.00		31			
SEP						
OCT	0.00		31			
NOV						
DEC	0.00		31			
TOTAL	0.00	0.0	212	0.00	0.0	0
OBSERVATIONS	7	0.0	7	0	0.0	0
PERCENTAGE OF PLANT EFFLUENT	0.00%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : SUDBURY
PLANT : SUDBURY WPCP
WORKS NUMBER : 110000711
WATERCOURSE : JUNCTION CREEK

REGION : NORTHEAST
DISTRICT : SUDBURY, REG. MUN.
OP AUTHORITY : MUNICIPAL
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 68.190
POPULATION SERVED : 95,000
TREATMENT : HIGH RATE

	PLANT BYPASS			SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN						
FEB						
MAR	162.99		6			
APR	120.05		8			
MAY						
JUN	100.00	52.5	4	45.50	34.0	2
JUL						
AUG						
SEP						
OCT						
NOV						
DEC						
TOTAL	383.04	52.5	18	45.50	34.0	2
OBSERVATIONS	3	1.0	3	1	1.0	1
PERCENTAGE OF PLANT EFFLUENT	2.52%			0.30%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : TIMMINS
PLANT : MATTAGAMI WPCP
WORKS NUMBER : 110000766
WATERCOURSE : MATTAGAMI RIVER

REGION : NORTHEAST
DISTRICT : COCHRANE
OP AUTHORITY : MUNICIPAL
MINOR BASIN : JAMES BAY
MAJOR BASIN : ARCTIC WATERSHED

DESIGN CAPACITY : 34.095
POPULATION SERVED : 33,000
TREATMENT : PRIMARY
:
:

	PLANT BYPASS			SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN						
FEB						
MAR						
APR						
MAY	2.80		1			
JUN						
JUL						
AUG						
SEP						
OCT						
NOV						
DEC						
TOTAL	2.80	0.0	1	0.00	0.0	0
OBSERVATIONS	1	0.0	1	0	0.0	0
PERCENTAGE OF PLANT EFFLUENT	0.04%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : TIMMINS
PLANT : WHITNEY & TISDALE WPCP
WORKS NUMBER : 110001391
WATERCOURSE : PORCUPINE RIVER

REGION : NORTHEAST
DISTRICT : COCHRANE
OP AUTHORITY : MUNICIPAL
MINOR BASIN : JAMES BAY
MAJOR BASIN : ARCTIC WATERSHED

DESIGN CAPACITY : 6.819
POPULATION SERVED : 7,300
TREATMENT : CONTACT STABILIZATION
:
:

	PLANT BYPASS			SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN						
FEB						
MAR	1.98	8.1	1			
APR	19.44	3.3	1			
MAY	4.24	17.3	1			
JUN	2.33	9.5	0			
JUL						
AUG	4.37	17.8	1			
SEP						
OCT						
NOV						
DEC						
TOTAL	32.37	56.0	4	0.00	0.0	0
OBSERVATIONS	5	5.0	5	0	0.0	0
PERCENTAGE OF PLANT EFFLUENT	2.18%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : VALLEY EAST
PLANT : HAMNER,VAL-CARON,VAL-THERESE
WORKS NUMBER : 110001541
WATERCOURSE : VERMILION RIVER

REGION : NORTHEAST
WDISTRICT : SUDBURY, REG. MUN.
OP AUTHORITY : MUNICIPAL
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 11.365
POPULATION SERVED : 17,337
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
: PHOSPHORUS REMOVAL-CONTINUOUS
:

	PLANT BYPASS			SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN						
FEB						
MAR						
APR	34.00	156.0	0			
MAY						
JUN						
JUL						
AUG						
SEP						
OCT						
NOV						
DEC						
TOTAL	34.00	156.0	0	0.00	0.0	0
OBSERVATIONS	1	1.0	1	0	0.0	0
PERCENTAGE OF PLANT EFFLUENT	1.20%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : WALDEN
PLANT : LIVELY WPCP
WORKS NUMBER : 120001185
WATERCOURSE : MEATBIRD CREEK

REGION : NORTHEAST
DISTRICT : SUDBURY, REG. MUN.
OP AUTHORITY : MUNICIPAL
MINOR BASIN : HURON
MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 1.591
POPULATION SERVED : 3,669
TREATMENT : EXTENDED AERATION

	PLANT BYPASS			SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN						
FEB						
MAR	7.78		3			
APR	1.10		1			
MAY						
JUN	0.65	10.5	2			
JUL						
AUG						
SEP						
OCT						
NOV						
DEC						
TOTAL	9.53	10.5	6	0.00	0.0	0
OBSERVATIONS	3	1.0	3	0	0.0	0
PERCENTAGE OF PLANT EFFLUENT	1.80%			0.00%		

NORTHWEST REGION

1989 BYPASS OCCURRENCES

MUNICIPALITY : ATIKOKAN
PLANT : ATIKOKAN WPCP
WORKS NUMBER : 110001523
WATERCOURSE : ATIKOKAN RIVER

REGION : NORTHWEST
DISTRICT : RAINY RIVER
OP AUTHORITY : MINISTRY OF THE ENVIRONMENT
MINOR BASIN : LAKE WINNIPEG EAST
MAJOR BASIN : NELSON RIVER

DESIGN CAPACITY : 4.082
POPULATION SERVED : 4,500
TREATMENT : EXTENDED AERATION
: PHOSPHORUS REMOVAL-CONTINUOUS
:

	PLANT BYPASS			SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN	0.00		1			
FEB	0.00		1			
MAR						
APR						
MAY						
JUN	0.14	3.0	1	0.00	0.0	0
JUL	0.02	1.5	1	0.00	0.0	0
AUG	0.00	0.0	0	0.00	0.0	0
SEP	0.18	2.8	1	0.00	0.0	0
OCT	0.00	0.0	0	0.00	0.0	0
NOV	0.00	0.0	0	0.00	0.0	0
DEC	0.00	0.0	0	0.00	0.0	0
TOTAL	0.35	7.3	5	0.00	0.0	0
OBSERVATIONS	9	7.0	9	7	7.0	7
PERCENTAGE OF PLANT EFFLUENT	0.03%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : DRYDEN
PLANT : DRYDEN WPCP
WORKS NUMBER : 120000248
WATERCOURSE : WABIGOON RIVER

REGION : NORTHWEST
DISTRICT : KENORA
OP AUTHORITY : MUNICIPAL
MINOR BASIN : LAKE WINNIPEG EAST
MAJOR BASIN : NELSON RIVER

DESIGN CAPACITY : 6.819
POPULATION SERVED : 6,900
TREATMENT : CONTACT STABILIZATION
:
:

	PLANT BYPASS			SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN						
FEB						
MAR						
APR	1.81	4.0	1			
MAY						
JUN						
JUL						
AUG	0.99	4.0	1	0.37	1.5	1
SEP						
OCT						
NOV						
DEC						
TOTAL	2.81	8.0	2	0.37	1.5	1
OBSERVATIONS	2	2.0	2	1	1.0	1
PERCENTAGE OF PLANT EFFLUENT	0.19%			0.03%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : EAR FALLS
PLANT : EAR FALLS WPCP
WORKS NUMBER : 110001006
WATERCOURSE : ENGLISH RIVER

REGION : NORTHWEST
DISTRICT : KENORA
OP AUTHORITY : MINISTRY OF THE ENVIRONMENT
MINOR BASIN : LAKE WINNIPEG EAST
MAJOR BASIN : NELSON RIVER

DESIGN CAPACITY : 2.864
POPULATION SERVED : 1,750
TREATMENT : EXTENDED AERATION
: CONVERTIBLE OPERATING MODE
:

	PLANT BYPASS			SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN						
FEB				0.00	0.0	0
MAR				0.00	0.0	0
APR				0.00	0.0	0
MAY				0.00	0.0	0
JUN				0.00	0.0	0
JUL				0.00	0.0	0
AUG				0.00	0.0	0
SEP	0.01	2.5	1	0.00	0.0	0
OCT				0.00	0.0	0
NOV				0.00	0.0	0
DEC						
TOTAL	0.01	2.5	1	0.00	0.0	0
OBSERVATIONS	1	1.0	1	10	10.0	10
PERCENTAGE OF PLANT EFFLUENT	0.00%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : FORT FRANCES
PLANT : FORT FRANCES WPCP
WORKS NUMBER : 110000258
WATERCOURSE : RAINY RIVER

REGION : NORTHWEST
DISTRICT : RAINY RIVER
OP AUTHORITY : MINISTRY OF THE ENVIRONMENT
MINOR BASIN : LAKE WINNIPEG EAST
MAJOR BASIN : NELSON RIVER

DESIGN CAPACITY : 9.092
POPULATION SERVED : 8,750
TREATMENT : PRIMARY
:
:

	PLANT BYPASS			SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN						
FEB	0.00	0.0	0	0.00	0.0	0
MAR	0.00	0.0	0	0.00	0.0	0
APR	0.00	0.0	0	0.00	0.0	0
MAY	0.00	0.0	1	0.00	0.0	0
JUN	0.00	0.0	0	0.00	0.0	0
JUL	0.00	0.0	0	0.00	0.0	0
AUG	0.00	0.0	0	0.00	0.0	0
SEP	0.00	0.0	0	0.00	0.0	0
OCT	0.00	0.0	0	0.00	0.0	0
NOV	0.00	0.0	0	0.00	0.0	0
DEC	0.00	0.0	0	0.00	0.0	0
TOTAL	0.00	0.0	1	0.00	0.0	0
OBSERVATIONS	11	11.0	11	11	11.0	11
PERCENTAGE OF PLANT EFFLUENT	0.00%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : GERALDTON
PLANT : GERALDTON WPCP
WORKS NUMBER : 110001649
WATERCOURSE : LAKE KENOGAMISIS

REGION : NORTHWEST
DISTRICT : THUNDER BAY
OP AUTHORITY : MINISTRY OF THE ENVIRONMENT
MINOR BASIN : JAMES BAY
MAJOR BASIN : ARCTIC WATERSHED

DESIGN CAPACITY : 1.814
POPULATION SERVED : 2,901
TREATMENT : EXTENDED AERATION
:
:

	PLANT BYPASS			SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN				0.00	0.0	0
FEB				0.00	0.0	0
MAR				0.00	0.0	0
APR	4.94	0.0	7	0.00	0.0	0
MAY	5.19	0.0	7	0.00	0.0	0
JUN	0.54	0.0	1	0.00	0.0	0
JUL				0.00	0.0	0
AUG				0.00	0.0	0
SEP				0.00	0.0	0
OCT				0.00	0.0	0
NOV				0.00	0.0	0
DEC				0.00	0.0	0
TOTAL	10.67	0.0	15	0.00	0.0	0
OBSERVATIONS	3	3.0	3	12	12.0	12
PERCENTAGE OF PLANT EFFLUENT	1.68%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : GOLDEN
PLANT : BALMERTOWN WPCP
WORKS NUMBER : 110003291
WATERCOURSE : BALMER CREEK

REGION : NORTHWEST
DISTRICT : KENORA
OP AUTHORITY : MINISTRY OF THE ENVIRONMENT
MINOR BASIN : LAKE WINNIPEG EAST
MAJOR BASIN : NELSON RIVER

DESIGN CAPACITY : 1.227
POPULATION SERVED : 1,300
TREATMENT : EXTENDED AERATION
:
:

	PLANT BYPASS			SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN						
FEB	0.00	0.0	0	0.00	0.0	0
MAR						
APR	0.00	0.0	0	0.00	0.0	0
MAY	0.00	0.0	1	0.00	0.0	0
JUN	0.50	16.0	1	0.00	0.0	0
JUL						
AUG						
SEP						
OCT						
NOV						
DEC						
TOTAL	0.50	16.0	2	0.00	0.0	0
OBSERVATIONS	4	4.0	4	4	4.0	4
PERCENTAGE OF PLANT EFFLUENT	0.13%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : KENORA
PLANT : KENORA WPCP
WORKS NUMBER : 120000239
WATERCOURSE : WINNIPEG RIVER

REGION : NORTHWEST
DISTRICT : KENORA
OP AUTHORITY : MUNICIPAL
MINOR BASIN : LAKE WINNIPEG EAST
MAJOR BASIN : NELSON RIVER

DESIGN CAPACITY : 18.184
POPULATION SERVED : 12,000
TREATMENT : EXT AERATION/CONT STABLIZATION
:
:

	PLANT BYPASS			SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN						
FEB						
MAR						
APR						
MAY						
JUN						
JUL						
AUG						
SEP						
OCT						
NOV					10.0	
DEC						
TOTAL	0.00	0.0	0	0.00	10.0	0
OBSERVATIONS	0	0.0	0	0	1.0	0
PERCENTAGE OF PLANT EFFLUENT	0.00%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : MARATHON
PLANT : MARATHON WPCP
WORKS NUMBER : 120000471
WATERCOURSE : LAKE SUPERIOR

REGION : NORTHWEST
DISTRICT : THUNDER BAY
OP AUTHORITY : MINISTRY OF THE ENVIRONMENT
MINOR BASIN : SUPERIOR
MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 4.400
POPULATION SERVED : 5,000
TREATMENT : EXTENDED AERATION
:
:

	PLANT BYPASS			SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN	0.00	0.0	0	0.00	0.0	0
FEB	0.16	2.0	1	0.00	0.0	0
MAR	0.00	0.0	0	0.00	0.0	0
APR	0.00	0.0	0	0.00	0.0	0
MAY	0.00	0.0	0	0.00	0.0	0
JUN	0.00	0.0	0	0.00	0.0	0
JUL	0.00	0.0	0	0.00	0.0	0
AUG	0.00	0.0	0	0.00	0.0	0
SEP	0.00	0.0	0	0.00	0.0	0
OCT	0.00	0.0	0	0.00	0.0	0
NOV	0.00	0.0	0	0.00	0.0	0
DEC	0.00	0.0	0	0.00	0.0	0
TOTAL	0.16	2.0	1	0.00	0.0	0
OBSERVATIONS	12	12.0	12	12	12.0	12
PERCENTAGE OF PLANT EFFLUENT	0.02%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : RED ROCK
PLANT : RED ROCK WPCP
WORKS NUMBER : 120001817
WATERCOURSE : NIPIGON BAY

REGION : NORTHWEST
DISTRICT : THUNDER BAY
OP AUTHORITY : MUNICIPAL
MINOR BASIN : SUPERIOR
MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 1.273
POPULATION SERVED : 1,150
TREATMENT : PRIMARY
:
:

	PLANT BYPASS			SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN	0.00		0			
FEB	0.00		0	0.00		0
MAR	0.00		0	0.00		0
APR	0.00		0	0.00		0
MAY	0.18		0			
JUN						
JUL	0.00		0			
AUG	0.00		0			
SEP	0.00		0			
OCT	0.00		0			
NOV	0.00		0			
DEC						
TOTAL	0.18	0.0	0	0.00	0.0	0
OBSERVATIONS	10	0.0	10	3	0.0	3
PERCENTAGE OF PLANT EFFLUENT	0.06%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : SCHREIBER
PLANT : SCHREIBER WPCP
WORKS NUMBER : 110002112
WATERCOURSE : CREEK TO L.SUPERIOR

REGION : NORTHWEST
DISTRICT : THUNDER BAY
OP AUTHORITY : MINISTRY OF THE ENVIRONMENT
MINOR BASIN : SUPERIOR
MAJOR BASIN : GREAT LAKES

DESIGN CAPACITY : 1.137
POPULATION SERVED : 1,937
TREATMENT : EXTENDED AERATION
: CONTACT STABILIZATION
: CONVERTIBLE OPERATING MODE

	PLANT BYPASS			SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN	0.00	0.0	0	0.00	0.0	0
FEB	0.00	0.0	0	0.00	0.0	0
MAR	0.00	0.0	0	0.00	0.0	0
APR	0.00	0.0	0	0.00	0.0	0
MAY	0.00	24.0	10	0.00	0.0	0
JUN	0.00	0.0	0	0.00	0.0	0
JUL	0.00	0.0	0	0.00	0.0	0
AUG	0.00	0.0	0	0.00	0.0	0
SEP	0.00	0.0	0	0.00	0.0	0
OCT	0.00	0.0	0	0.00	0.0	0
NOV	0.00	0.0	0	0.00	0.0	0
DEC	0.00	0.0	0	0.00	0.0	0
TOTAL	0.00	24.0	10	0.00	0.0	0
OBSERVATIONS	12	12.0	12	12	12.0	12
PERCENTAGE OF PLANT EFFLUENT	0.00%			0.00%		

1989 BYPASS OCCURRENCES

MUNICIPALITY : SIOUX LOOKOUT
PLANT : SIOUX LOOKOUT WPCP
WORKS NUMBER : 120000220
WATERCOURSE : PELICAN LAKE

REGION : NORTHWEST
DISTRICT : KENORA
OP AUTHORITY : MUNICIPAL
MINOR BASIN : LAKE WINNIPEG EAST
MAJOR BASIN : NELSON RIVER

DESIGN CAPACITY : 2.273
POPULATION SERVED : 3,006
TREATMENT : CONVENTIONAL ACTIVATED SLUDGE
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	PLANT BYPASS			SECONDARY BYPASS		
MONTHS	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES	VOLUME (1000M3)	DURATION (HOURS)	NO OF TIMES
JAN	0.00		0	1.32		1
FEB	0.00		0	0.00		0
MAR	0.00		0	0.00		0
APR	0.00		0	0.00		0
MAY	0.00	0.0	0	0.00	0.0	0
JUN	0.00	0.0	0	0.00	0.0	0
JUL	0.00	0.0	0	0.00	0.0	0
AUG						
SEP						
OCT	0.00	0.0	0	0.00	0.0	0
NOV	0.00		0	0.00		0
DEC	0.00	0.0	0	0.00		0
TOTAL	0.00	0.0	0	1.32	0.0	1
OBSERVATIONS	10	5.0	10	10	4.0	10
PERCENTAGE OF PLANT EFFLUENT	0.00%			0.20%		